STN Columbus

```
Welcome to STN International
                  Web Page for STN Seminar Schedule - N. America
 NEWS
       2
          MAR 31
                  IFICDB, IFIPAT, and IFIUDB enhanced with new custom
 NEWS
                  IPC display formats
                  CAS REGISTRY enhanced with additional experimental
 NEWS
       3
          MAR 31
                  spectra
 NEWS
          MAR 31
                  CA/CAplus and CASREACT patent number format for U.S.
                  applications updated
 NEWS
          MAR 31
                  LPCI now available as a replacement to LDPCI
 NEWS
          MAR 31
                  EMBASE, EMBAL, and LEMBASE reloaded with enhancements
      7
          APR 04
                  STN AnaVist, Version 1, to be discontinued
 NEWS
                  WPIDS, WPINDEX, and WPIX enhanced with new
 NEWS 8 APR 15
                  predefined hit display formats
 NEWS 9 APR 28
                  EMBASE Controlled Term thesaurus enhanced
 NEWS 10
          APR 28
                  IMSRESEARCH reloaded with enhancements
 NEWS 11 MAY 30
                  INPAFAMDB now available on STN for patent family
                  searching
 NEWS 12
          MAY 30
                  DGENE, PCTGEN, and USGENE enhanced with new homology
                  sequence search option
 NEWS 13
          JUN 06
                  EPFULL enhanced with 260,000 English abstracts
 NEWS 14
          JUN 06
                  KOREAPAT updated with 41,000 documents
 NEWS 15
          JUN 13
                  USPATFULL and USPAT2 updated with 11-character
                  patent numbers for U.S. applications
                  CAS REGISTRY includes selected substances from
 NEWS 16
          JUN 19
                  web-based collections
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          JUN 25
                  CA/CAplus and USPAT databases updated with IPC
                  reclassification data
 NEWS 18
          JUN 30
                  AEROSPACE enhanced with more than 1 million U.S.
                  patent records
 NEWS 19
          JUN 30
                  EMBASE, EMBAL, and LEMBASE updated with additional
                  options to display authors and affiliated
                  organizations
 NEWS 20
          JUN 30
                  STN on the Web enhanced with new STN AnaVist
                  Assistant and BLAST plug-in
                  STN AnaVist enhanced with database content from EPFULL
 NEWS 21
          JUN 30
 NEWS 22
          JUL 28
                  CA/CAplus patent coverage enhanced
 NEWS 23
          JUL 28
                  EPFULL enhanced with additional legal status
                  information from the epoline Register
 NEWS 24
          JUL 28
                  IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
 NEWS 25
          JUL 28
                  STN Viewer performance improved
 NEWS 26
          AUG 01
                  INPADOCDB and INPAFAMDB coverage enhanced
 NEWS 27
          AUG 13
                  CA/CAplus enhanced with printed Chemical Abstracts
                  page images from 1967-1998
 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.
 NEWS HOURS
               STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN
               Welcome Banner and News Items
 NEWS IPC8
               For general information regarding STN implementation of IPC 8
Enter NEWS followed by the item number or name to see news on that
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```

research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may

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result in loss of user privileges and other penalties.

=> rile reg

RILE IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> file reg
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.21
0.21

FILE 'REGISTRY' ENTERED AT 02:17:57 ON 15 AUG 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 AUG 2008 HIGHEST RN 1040889-91-5 DICTIONARY FILE UPDATES: 13 AUG 2008 HIGHEST RN 1040889-91-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

```
=> e thiohydantoin/cn
E1
             1
                   THIOHOMOCHOLINE/CN
E.2
             1
                  THIOHOMOSILDENAFIL/CN
             1 --> THIOHYDANTOIN/CN
E3
E4
                  THIOHYDRACRYLIC ACID/CN
E5
                  THIOHYDROPEROXIDE, O-METHYL/CN
                 THIOHYDROPEROXIDE, O-METHYL, IRIDIUM COMPLEX/CN
             2
E6
                 THIOHYDROQUINONE/CN
THIOHYDROXIMATE GLUCOSYLTRANSFERASE/CN
E7
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             1
E8
                  THIOHYDROXYCARBENE/CN
            1
E9
                 THIOHYDROXYL/CN
E10
            1
E11
            1
                  THIOHYDROXYLAMINE/CN
E12
            3
                 THIOHYDROXYLAMINE, COBALT DERIV./CN
=> s e3
             1 THIOHYDANTOIN/CN
L1
=> d
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
     503-87-7 REGISTRY
     Entered STN: 16 Nov 1984
F.D
    4-Imidazolidinone, 2-thioxo- (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Hydantoin, 2-thio- (6CI, 7CI, 8CI)
CN
OTHER NAMES:
CN
    2-Thiohvdantoin
     2-Thioxo-4-imidazolidinone
CN
CN
    4-0xo-2-thioxoimidazolidine
    Imidazolidin-4-one-2-thione
CN
    NSC 11772
CN
CN
     Thiohydantoin
    C3 H4 N2 O S
MF
CI
     COM
                  AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
LC
       CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM,
       EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, PIRA, RTECS*, SPECINFO,
```

```
TOXCENTER, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

532 REFERENCES IN FILE CA (1907 TO DATE)

72 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

532 REFERENCES IN FILE CAPLUS (1907 TO DATE)

37 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file uspatall
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
11.75 11.96

FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 02:24:06 ON 15 AUG 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 02:24:06 ON 15 AUG 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 02:24:06 ON 15 AUG 2008 CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

=> s (shaving gel or shaving cream or shaving foam)
L2 3644 (SHAVING GEL OR SHAVING CREAM OR SHAVING FOAM)

=> s (shaving gel or shaving cream or shaving foam)/clm
L3 431 (SHAVING GEL OR SHAVING CREAM OR SHAVING FOAM)/CLM

=> s (reduct?)

L4 1654032 (REDUCT?)

=> s (reduct?)/clm

L5 133396 (REDUCT?)/CLM

=> s (thiosulfate)

L6 33599 (THIOSULFATE)

=> s (thiosulfate)/clm

L7 3053 (THIOSULFATE)/CLM

=> s 14 and 16

L8 20621 L4 AND L6

 \Rightarrow s 15 and 17

L9 303 L5 AND L7

=> s 12 and 18

L10 32 L2 AND L8

=> s 13 and 19

L11 1 L3 AND L9

=> d

L11 ANSWER 1 OF 1 USPATFULL on STN

Full Text

AN 2004:214980 USPATFULL

TI Shave gel compositions

IN Manivannan, Gurusamy, North Chelmsford, MA, UNITED STATES

```
Novikov, Alexander, Framingham, MA, UNITED STATES
       Thong, Stephen, Needham, MA, UNITED STATES
       Barnet, Alfred, Hingham, MA, UNITED STATES
       Xu, Yun, Andover, MA, UNITED STATES
       US 20040166085
                         A1 20040826
A1 20030221 (10)
PΙ
       US 2003-371619
AΙ
DT
       Utility
       APPLICATION
FS
LN.CNT 596
INCL
       INCLM: 424/073.000
       NCLM: 424/073.000
NCL
IC
       [7]
              A61K007-15
       ICM
       IPCI
              A61K0007-15 [ICM, 7]
              A61K0008-04 [I,C*]; A61K0008-04 [I,A]; A61K0008-19 [I,C*];
       IPCR
              A61K0008-22 [I,A]; A61K0008-30 [I,C*]; A61K0008-46 [I,A];
              A61Q0009-02 [I,C*]; A61Q0009-02 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d his
     (FILE 'HOME' ENTERED AT 02:17:12 ON 15 AUG 2008)
     FILE 'REGISTRY' ENTERED AT 02:17:57 ON 15 AUG 2008
                E THIOHYDANTOIN/CN
              1 S E3
T.1
     FILE 'USPATFULL, USPATOLD, USPAT2' ENTERED AT 02:24:06 ON 15 AUG 2008
           3644 S (SHAVING GEL OR SHAVING CREAM OR SHAVING FOAM)
L2
            431 S (SHAVING GEL OR SHAVING CREAM OR SHAVING FOAM)/CLM
L3
        1654032 S (REDUCT?)
L4
L5
         133396 S (REDUCT?)/CLM
L6
          33599 S (THIOSULFATE)
           3053 S (THIOSULFATE)/CLM
T.7
1.8
          20621 S L4 AND L6
            303 S L5 AND L7
L9
             32 S L2 AND L8
L10
L11
              1 S L3 AND L9
=> s 19 1-32
MISSING OPERATOR L9 1-32
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.
=> d 19 1-32
L9
    ANSWER 1 OF 303 USPATFULL on STN
Full Text
ΑN
       2008:171617 USPATFULL
       System and Process for Treatment and De-halogenation of Ballast Water
TΙ
       Childers, Harold E., Houston, TX, UNITED STATES Fernandez, Randolto, Houston, TX, UNITED STATES
ΙN
       Matousek, Rudolf C., Richmond, TX, UNITED STATES
       Moore, James B., Katy, TX, UNITED STATES
       Hill, David W., Sugar Land, TX, UNITED STATES
PТ
       US 20080149485
                       A1 20080626
                                20070601 (11)
ΑI
       US 2007-757315
                           A1
       Continuation-in-part of Ser. No. US 2005-37642, filed on 18 Jan 2005,
RLI
       Pat. No. US 7244348
DТ
       Utility
FS
       APPLICATION
LN.CNT 1112
       INCLM: 204/555.000
INCL
       INCLS: 204/661.000
NCL
       NCLM:
              204/555.000
              204/661.000
       NCLS:
IC
              B01D0057-02 [I,A]; B01D0035-06 [I,A]
       IPCI
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
T.9
     ANSWER 2 OF 303 USPATFULL on STN
Full Text
```

```
AN
        2008:121299 USPATFULL
ΤI
       METHOD FOR THIOSULFATE LEACHING OF PRECIOUS METAL-CONTAINING MATERIALS
ΙN
        Ji, Jinxing, Burnaby, CANADA
        Fleming, Christopher Andrew, Omemee, CANADA
        West-Sells, Paul George, Vancouver, CANADA
       Hackl, Ralph Peter, Vancouver, CANADA PLACER DOME TECHNICAL SERVICES LIMITED, Vancouver, CANADA, V7X 1P1
PA
        (non-U.S. corporation)
PΙ
        US 20080105088
                             A 1
                                  20080508
        US 2007-927170
                             A1 20071029 (11)
AΙ
       Continuation of Ser. No. US 2004-836480, filed on 30 Apr 2004, PENDING
RLI
        Division of Ser. No. US 2003-446548, filed on 27 May 2003, GRANTED, Pat.
       No. US 7066983 Division of Ser. No. US 2001-852699, filed on 11 May 2001, GRANTED, Pat. No. US 6660059
       US 2000-205472P
PRAI
                             20000519 (60)
       Utility
DT
FS
       APPLICATION
LN.CNT 1381
INCL
       INCLM: 075/744.000
        INCLS: 075/739.000
               075/744.000
NCL
       NCLM:
               075/739.000
       NCLS:
TC
       IPCI
               C22B0011-00 [I,A]; C22B0003-04 [I,A]; C22B0003-00 [I,C*]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 3 OF 303 USPATFULL on STN
L9
Full Text
ΑN
        2007:335668 USPATFULL
ΤI
       Anti-Fatique Composition
        Kishida, Hideyuki, Kakogawa-shi, JAPAN
IN
        Kawabe, Taizo, Himeji-shi, JAPAN
        Hosoe, Kazunori, Takasago-shi, JAPAN
        Fujii, Kenji, Kobe-shi, JAPAN
       US 20070293572
                             A1 20071220
PI
                             A1 20050509 (11)
       US 2005-596059
ΑT
       WO 2005-JP8422
                                  20050509
                                  20070803 PCT 371 date
PRAT
       JP 2004-141417
                              20040511
       JP 2004-263225
                              20040910
       Utility
DT
FS
       APPLICATION
LN.CNT 651
INCL
        INCLM: 514/561.000
        INCLS: 514/731.000
               514/561.000
NCL
       NCLM:
               514/731.000
       NCLS:
               A61K0031-05 [I,A]; A61K0031-045 [I,C*]; A61K0031-205 [I,A];
IC
       IPCI
               A61K0031-185 [I,C*]; A61P0025-26 [I,A]; A61P0025-00 [I,C*]
               A61K0031-045 [I,C]; A61K0031-05 [I,A]; A23L0001-30 [I,C*];
       IPCR
               A23L0001-30 [I,A]; A23L0001-302 [N,C*]; A23L0001-302 [N,A];
               A61K0031-075 [I,C*]; A61K0031-09 [I,A]; A61K0031-122 [I,C*]; A61K0031-122 [I,A]; A61K0031-185 [I,C]; A61K0031-205 [I,A]; A61K0045-00 [I,C*]; A61K0045-06 [I,A]; A61P0001-00 [I,C*];
               A61P0001-04 [I,A]; A61P0001-14 [I,A]; A61P0003-00 [I,C*];
               A61P0003-02 [I,A]; A61P0007-00 [I,C*]; A61P0007-00 [I,A];
               A61P0009-00 [I,C*]; A61P0009-04 [I,A]; A61P0021-00 [I,C*];
               A61P0021-04 [I,A]; A61P0025-00 [I,C]; A61P0025-26 [I,A];
               A61P0043-00 [I,C*]; A61P0043-00 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 4 OF 303 USPATFULL on STN
L9
Full Text
        2007:312439 USPATFULL
NA
TΤ
       Multi-zone ground water and soil treatment
TN
        Kerfoot, William B., Falmouth, MA, UNITED STATES
PΙ
       US 20070272623
                             A1
                                  20071129
                             A1 20060525 (11)
       US 2006-440579
AΙ
       Utility
DT
       APPLICATION
FS
LN.CNT 569
INCL
       INCLM: 210/759.000
NCL
       NCLM: 210/759.000
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C02F0001-72 [I,A]
IC
       IPCI
              C02F0001-72 [I,C]; C02F0001-72 [I,A]
       TPCR
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 5 OF 303 USPATFULL on STN
L9
Full Text
       2007:297060 USPATFULL
ΑN
       Mitochondria Activators
ТΤ
ΙN
       Fujii, Kenji, Kobe-shi, JAPAN
       Matsumoto, Shuka, Himeji-shi, JAPAN
       Hosoe, Kazunori, Takasago-shi, JAPAN
PA
       KANEKA CORPORATION, Osaka-shi, JAPAN, 530-8288 (non-U.S. corporation)
                            A1 20071108
       US 20070259908
PΙ
AΙ
       US 2005-661419
                            Α1
                                20050825 (11)
       WO 2005-JP15401
                                20050825
                                20070313 PCT 371 date
PRAI
       JP 2004-249494
                            20040830
       JP 2004-249495
                            20040830
       Utility
DT
FS
       APPLICATION
LN.CNT 990
INCL
       INCLM: 514/292.000
       INCLS: 546/084.000
NCL
       NCLM:
              514/292.000
              546/084.000
       NCLS:
              A61K0031-437 [I,A]; A61K0031-4353 [I,C*]; A61P0025-00 [I,A];
IC
       IPCI
              A61P0003-10 [I,A]; A61P0003-00 [I,C*]; C07D0471-04 [I,A];
              C07D0471-00 [I,C*]
              A61K0031-4353 [I,C]; A61K0031-437 [I,A]; A61P0003-00 [I,C];
       TPCR
              A61P0003-10 [I,A]; A61P0025-00 [I,C]; A61P0025-00 [I,A];
              C07D0471-00 [I,C]; C07D0471-04 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 6 OF 303 USPATFULL on STN
L9
     Text
Full
ΑN
       2007:290631 USPATFULL
ΤI
       Method for Performing the Hot Start of Enzymatic Reactions
TN
       Ignatov, Konstantin, Moscow, RUSSIAN FEDERATION
       Kramarov, Vladimir, Moscow, RUSSIAN FEDERATION
       US 20070254327
                            A1 20071101
PΙ
ΑI
       US 2005-632700
                            A1 20050714 (11)
       WO 2005-GB2774
                                 20050714
                                 20070314 PCT 371 date
PRAI
       GB 2004-16293
                            20040721
       US 2004-589591P
                            20040721 (60)
DT
       Utility
FS
       APPLICATION
LN.CNT 727
       INCLM: 435/025.000
INCL
       INCLS: 435/183.000
NCL
       NCLM:
              435/025.000
       NCLS:
              435/183.000
TC
       IPCI
              C12Q0001-68 [I,A]
              C12Q0001-68 [I,C]; C12Q0001-68 [I,A]
       IPCR
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 7 OF 303 USPATFULL on STN
T.9
     Text
Full
       2007:256682 USPATFULL
AN
       Site-specific enzymatic deposition of metal in situ
ΤI
       Hainfeld, James F., Shoreham, NY, UNITED STATES
IN
       Liu, Wenqiu, Miller Place, NY, UNITED STATES
PΙ
       US 20070224625
                            A1 20070927
AΙ
       US 2007-714682
                            A1 20070305 (11)
       Continuation-in-part of Ser. No. US 2007-627735, filed on 26 Jan 2007,
RLT
       PENDING Division of Ser. No. US 2003-658609, filed on 8 Sep 2003, GRANTED, Pat. No. US 7183072 Continuation-in-part of Ser. No. US
       2001-822131, filed on 30 Mar 2001, GRANTED, Pat. No. US 6670113
       Utility
DT
       APPLICATION
LN.CNT 2966
TNCL
       INCLM: 435/006.000
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INCLS: 435/183.000; 435/007.940
NCL
              435/006.000
       NCLM:
       NCLS:
              435/007.940; 435/183.000
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               G01N0033-53 [I,C]; G01N0033-53 [I,A]; C12N0009-00 [I,C];
       IPCR
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
T.9
     ANSWER 8 OF 303 USPATFULL on STN
Full Text
       2007:228637 USPATFULL
ΑN
TT
       Dialysate of peritoneal dialysis and its preparation method
ΙN
       Sakai, Asahi, Sakura-shi, JAPAN
       Nakayama, Masaaki, Tokyo, JAPAN
                            A1 20070830
PT
       US 20070199898
                            A1 20070212 (11)
       US 2007-704931
ΑТ
RLI
       Division of Ser. No. US 2003-380350, filed on 13 Mar 2003, ABANDONED A
       371 of International Ser. No. WO 2001-JP7772, filed on 7 Sep 2001
       JP 2000-277810
PRAI
                             20000913
       JP 2001-40718
                             20010216
       JP 2001-186642
                            20010620
DT
       Utility
       APPLICATION
FS
LN.CNT 538
       INCLM: 210/647.000
INCL
       INCLS: 424/703.000
       NCLM: 210/647.000
NCL
       NCLS:
              424/703.000
              A61K0033-04 [I,A]; B01D0061-00 [I,A]
A61K0033-04 [I,C]; A61K0033-04 [I,A]; A61L0002-04 [I,C*];
       IPCI
TC
       IPCR
               A61L0002-06 [I,A]; A61K0009-08 [I,C*]; A61K0009-08 [I,A];
               A61K0045-00 [I,C*]; A61K0045-06 [I,A]; A61M0001-14 [I,C*];
               A61M0001-14 [I,A]; A61M0001-28 [I,C*]; A61M0001-28 [I,A];
               B01D0061-00 [I,C]; B01D0061-00 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 9 OF 303 USPATFULL on STN
Full Text
AΝ
       2007:200717 USPATFULL
       ELECTROLESS GOLD PLATING SOLUTION AND METHOD
ΤI
ΙN
       Hwang, Kilnam, Cranston, RI, UNITED STATES
                            A1 20070802
       US 20070175359
PТ
ΑI
       US 2006-566935
                            Α1
                                 20061205 (11)
PRAI
       US 2006-764575P
                            20060201 (60)
DT
       Utility
       APPLICĀTION
FS
LN.CNT 562
INCL
       INCLM: 106/012.300
       INCLS: 106/012.600; 427/437.000; 427/443.100; 427/282.000
NCL
       NCLM:
              106/001.230
              106/001.260; 427/282.000; 427/437.000; 427/443.100
C23C0018-44 [I,A]; C23C0018-31 [I,C*]; B05D0001-18 [I,A];
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IC
               B05D0005-00 [I,A]
               C23C0018-31 [I,C]; C23C0018-44 [I,A]; B05D0001-18 [I,C];
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L9
     ANSWER 10 OF 303 USPATFULL on STN
Full Text
       2007:30234 USPATFULL
AN
       Amino acid and metabolite biosynthesis
ΤТ
IN
       Madden, Kevin T., Arlington, MA, UNITED STATES
       Walbridge, Michael J., Dorchester, MA, UNITED STATES
       Yorgey, Peter S., Cambridge, MA, UNITED STATES
       Doten, Reed, Framingham, MA, UNITED STATES
                            A1 20070201
A1 20060619
PΙ
       US 20070026505
       US 2006-455390
                                 20060619 (11)
AΙ
                             20050617 (60)
       US 2005-692037P
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       US 2005-750592P
                            20051215 (60)
DT
       Utility
       APPLICATION
LN.CNT 5681
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INCL
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NCL
             435/106.000
       NCLS:
              435/252.300; 435/252.330; 435/471.000
              C12P0013-04 [I,A]; C12P0013-00 [I,C*]; C12N0001-21 [I,A];
IC
       IPCI
              C12N0015-74 [I,A]
              C12P0013-00 [I,C]; C12P0013-04 [I,A]; C12N0001-21 [I,C];
       IPCR
              C12N0001-21 [I,A]; C12N0015-74 [I,C]; C12N0015-74 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 11 OF 303 USPATFULL on STN
1.9
Full Text
       2006:305714 USPATFULL
ΑN
ΤI
       Cerium ion-containing solution and corrosion inhibitor
ΙN
       Nakayama, Junichi, Echizen-shi, JAPAN
       Shin-Etsu Chemical Co., Ltd. (non-U.S. corporation)
PA
PΤ
       US 20060261313
                          A1 20061123
                           A1 20060522 (11)
AΙ
       US 2006-437633
                           20050523
       JP 2005-149632
PRAI
       JP 2005-149648
                           20050523
       JP 2005-149708
                           20050523
DT
       Utility
       APPLICATION
FS
LN.CNT 670
       INCLM: 252/389.100
INCL
       INCLS: 534/015.000
       NCLM: 252/389.100
NCL
       NCLS:
             534/015.000
                          [I,A]; C09K0015-16 [I,A]; C09K0015-00 [I,C*]
       IPCI
              C07F0005-00
TC
                          [I,C]; C07F0005-00 [I,A]; C09K0015-00 [I,C];
       IPCR
              C07F0005-00
              C09K0015-16 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 12 OF 303 USPATFULL on STN
L9
Full Text
ΑN
       2006:298643 USPATFULL
ΤI
       PROCESS CONTROL OXIDATION
TM
       Burns, Ivey, 1175 Benji Ridge Court, Kissimmee, FL, UNITED STATES 34737
       Charanda, Thoram, 3975 Dora Wood Drive, Mount Dora, FL, UNITED STATES
       32757
       Nicodemo, Thomas J., 15916 Lake Orienta Court, Clermont, FL, UNITED
       STATES 34711
       Davis, Richard, 5455 Boutin Lane, St. Cloud, FL, UNITED STATES
       Crowder, Janell, 1013 Falling Leaf Street, Celebration, FL, UNITED
       STATES
               34747
       US 20060254987
PΤ
                           A1 20061116
ΑI
       US 2006-459597
                           A1 20060724 (11)
       Division of Ser. No. US 2005-173103, filed on 30 Jun 2005, PENDING
       US 2004-586337P
                           20040707 (60)
PRAT
DT
       Utility
FS
       APPLICATION
LN.CNT 1505
INCL
       INCLM: 210/746.000
       NCLM: 210/746.000
NCL
IC
       TPCT
              C02F0001-00 [I,A]
              C02F0001-00 [I,C]; C02F0001-00 [I,A]
       IPCR
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 13 OF 303 USPATFULL on STN
L9
Full Text
       2006:273893 USPATFULL
ΑN
ΤI
       Production of titania
       Roche, Eric Girvan, Buoragul, AUSTRALIA
TN
       Stuart, Alan David, New Lambton, AUSTRALIA
       Grazier, Philip Ernest, Kilaben Bay, AUSTRALIA
PΙ
       US 20060233686
                           Α1
                               20061019
       US 2003-531795
                               20031017 (10)
AΙ
                           Α1
       WO 2003-AU1384
                               20031017
                               20060505 PCT 371 date
      NL 2002-952157
                           20021018
PRAI
DT
       Utility
FS
       APPLICATION
```

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LN.CNT 995
       INCLM: 423/082.000
NCL
       NCLM:
              423/082.000
              C01G0025-06 [I,A]; C01G0025-00 [I,C*]
IC
       IPCI
              C01G0025-00 [I,C]; C01G0025-06 [I,A]; C22B0003-00 [I,C*];
       IPCR
              C22B0003-08 [I,A]; C22B0003-44 [I,A]; C22B0034-00 [I,C*];
              C22B0034-12 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L9
     ANSWER 14 OF 303 USPATFULL on STN
Full Text
       2006:227743 USPATFULL
ΑN
TΙ
       Silver manganese salt cathodes for alkali
IN
       Licht, Stuart, Technion City, ISRAEL
       Chemergy, Energy Technologies, Technion City, ISRAEL (non-U.S.
PA
       corporation)
PΤ
       US 20060194107
                            A1
                                20060831
       US 2005-223137
                           A1 20050912 (11)
AΙ
       Continuation of Ser. No. US 2002-76268, filed on 13 May 2002, ABANDONED
RLI
PRAI
       IL 2001-141527
                            20010220
DT
       Utility
FS
       APPLICATION
LN.CNT 416
INCL
       INCLM: 429/219.000
       INCLS: 429/224.000; 429/232.000
              429/219.000
NCL
       NCLM:
              429/224.000; 429/232.000
       NCLS:
IC
       IPCI
              \mbox{H01M0004-54} [I,A]; \mbox{H01M0004-48} [I,C*]; \mbox{H01M0004-50} [I,A];
              H01M0004-62 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 15 OF 303 USPATFULL on STN
L9
Full Text
ΑN
       2006:212026 USPATFULL
       METHOD AND SYSTEM FOR TREATING A SUBSTRATE WITH A HIGH PRESSURE FLUID
ΤT
       USING A PEROXIDE-BASED PROCESS CHEMISTRY IN CONJUNCTION WITH AN
       INITIATOR
TN
       Kevwitch, Robert, 2870 E. Carla Vista Drive, Chandler, AZ, UNITED STATES
       85225
PA
       TOKYO ELECTRON LIMITED, Tokyo, JAPAN (non-U.S. corporation)
PΙ
       US 20060180174
                            A1 20060817
       US 2005-906350
                            A1 20050215 (10)
ΑТ
       Utility
DT
       APPLICATION
LN.CNT 967
       INCLM: 134/001.300
INCL
       INCLS: 427/248.100; 134/056.000R
NCL
              134/001.300
              134/056.000R; 427/248.100
       NCLS:
IC
              C23C0016-00 [I,A]; B08B0006-00 [I,A]; B08B0003-00 [I,A]
       TPCT
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 16 OF 303 USPATFULL on STN
L9
Full Text
ΑN
       2006:208369 USPATFULL
ΤI
       Production of titania
       Roche, Eric Girvan, Shortland, AUSTRALIA Stuart, Alan David, Shorthand, AUSTRALIA
TM
       Grazier, Philip Ernest, Shortland, AUSTRALIA
       US 20060177363
                                20060810
PΙ
                            Α1
       US 2003-531784
                                20031017 (10)
AΙ
                            Α1
       WO 2003-AU1386
                                 20031017
                                 20060216 PCT 371 date
                           20021018
       AU 2002-2002952158
PRAI
DT
       Utility
FS
       APPLICATION
LN.CNT 988
       INCLM: 423/083.000
INCL
       NCLM: 423/083.000
NCL
              C22B0034-10 [I,A]; C22B0034-00 [I,C*]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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L9
     ANSWER 17 OF 303 USPATFULL on STN
Full Text
ΑN
       2006:181373 USPATFULL
ΤТ
       Production of titania
ΙN
       Roche, Eric Girvan, VALE STREET, SHORTLAND, NEW SOUTH WALES, AUSTRALIA
       2307
       Stuart, Alan David, New South Wales, AUSTRALIA
       Grazier, Ernest Philip, New South Wales, AUSTRALIA
       Liu, Houyuan, New South Wales, AUSTRALIA
PΙ
       US 20060153768
                             A1 20060713
                             A1 20031017 (10)
AΙ
       US 2003-531804
       WO 2003-AU1385
                                 20031017
                                 20060126 PCT 371 date
PRAI
       AU 2002-2002952155
                            20021018
       Utility
DT
       APPLICATION
FS
LN.CNT 1001
INCL
       INCLM: 423/610.000
              423/610.000
NCL.
       NCLM:
IC
       IPCI
              C01G0023-047 [I,A]; C01G0023-00 [I,C*]
              C01G0023-00 [I,C]; C01G0023-047 [I,A]; C22B0003-00 [I,C*]; C22B0003-26 [I,A]; C22B0034-00 [I,C*]; C22B0034-12 [I,A]
       IPCR
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L9
     ANSWER 18 OF 303 USPATFULL on STN
Full Text
       2006:117433 USPATFULL
ΑN
ΤI
       Expulsive liquid for exterminating disease injury of plants
       Saitou, Yousuke, Aichi-ken, JAPAN
HOSHIZAKI DENKI KABUSHIKI KAISHA, Toyoake-shi, JAPAN (non-U.S.
ΙN
PΑ
       corporation)
       US 20060099274
                             A1 20060511
ΑI
       US 2004-985002
                            A1 20041110 (10)
       Utility
DT
FS
       APPLICATION
LN.CNT 296
       INCLM: 424/600.000
INCL
NCL
       NCLM: 424/600.000
              A01N0059-00 [I,A]
IC
       IPCI
              A01N0059-00 [I,A]; A01N0059-00 [I,C]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 19 OF 303 USPATFULL on STN
L9
Full Text
       2006:33799 USPATFULL
ΑN
       Self-heating non-aerosol shave product
ΤТ
       Novikov, Alexander, Framingham, MA, UNITED STATES
IN
       Obias, Honorio V., Medford, MA, UNITED STATES Xu, Yun, Andover, MA, UNITED STATES
       Barnet, Alfred G., Hingham, MA, UNITED STATES
       Thong, Stephen H., Pennington, NJ, UNITED STATES
PA
       The Gillette Company (U.S. corporation)
                        A1 20060209
       US 20060029566
PΤ
                            A1 20040809 (10)
       US 2004-914428
AΙ
DT
       Utility
FS
       APPLICATION
LN.CNT 653
INCL
       INCLM: 424/073.000
NCL
       NCLM:
              424/073.000
       IPCI
              A61K0008-39 [I,A]; A61K0008-30 [I,C*]
IC
              A61K0008-30 [I,C]; A61K0008-39 [I,A]
       IPCR
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 20 OF 303 USPATFULL on STN
L9
Full Text
       2006:33798 USPATFULL
ΑN
ΤI
       Self-heating shave foam product
       Xu, Yun, Andover, MA, UNITED STATES
IN
       Obias, Honorio V., Medford, MA, UNITED STATES
       Novikov, Alexander, Framingham, MA, UNITED STATES
       Barnet, Alfred G., Hingham, MA, UNITED STATES
       Thong, Stephen H., Pennington, NJ, UNITED STATES
```

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PΑ
       The Gillette Company (U.S. corporation)
PΙ
       US 20060029565 A1 20060209
AΙ
       US 2004-914427
                            A1 20040809 (10)
DT
       Utility
       APPLICATION
FS
LN.CNT 777
INCL
       INCLM: 424/073.000
             424/073.000
NCL
       NCLM:
IC
              A61K0008-39 [I,A]; A61K0008-30 [I,C*]
              A61K0008-30 [I,C]; A61K0008-39 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 21 OF 303 USPATFULL on STN
L9
Full Text
       2006:7280 USPATFULL
ΑN
       Process control oxidation
ΤT
IN
       Burns, Ivey, Kissimmee, FL, UNITED STATES
       Charanda, Thoram, Mount Dora, FL, UNITED STATES
       Nicodemo, Thomas J., Clermont, FL, UNITED STATES Davis, Richard, St. Cloud, FL, UNITED STATES
       Crowder, Janell, Celebration, FL, UNITED STATES
       US 20060006122
PΙ
                            A1 20060112
       US 2005-173103
                            A1 20050630 (11)
ΑТ
PRAI
       US 2004-586337P
                            20040707 (60)
DT
       Utility
FS
       APPLICATION
LN.CNT 1719
INCL
       INCLM: 210/758.000
NCL
       NCLM: 210/758.000
IC
       IPCI
              C02F0001-72 [I,A]
              C02F0001-72 [I,A]; C02F0001-72 [I,C]
       IPCR
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 22 OF 303 USPATFULL on STN
L9
Full Text
ΑN
       2006:4743 USPATFULL
ΤI
       Process for the preparation of Imiquimod
TN
       Razzetti, Gabriele, Sesto S. Giovanni, ITALY
       Porta, Eleonora, Erba, ITALY
       US 20060004202
PΙ
                           A1 20060105
ΑI
       US 2005-159129
                            A1 20050623 (11)
       IT 2004-MI1282
                            20040624
PRAT
       Utility
DT
       APPLICATION
FS
LN.CNT 325
       INCLM: 546/082.000
INCL
              546/082.000
NCL
       NCLM:
              C07D0471-02 [I,A]
       IPCI
       IPCR
              C07D0471-00 [I,C]; C07D0471-02 [I,A]; C07D0471-04 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 23 OF 303 USPATFULL on STN
Full Text
ΑN
       2005:267528 USPATFULL
ΤI
       Reversible oxidation of carbon nanotubes
ΙN
       Diner, Bruce A., Chadds Ford, PA, UNITED STATES
       Zheng, Ming, Wilmington, DE, UNITED STATES
                            A1 20051020
A1 20050301
PΙ
       US 20050232844
       US 2005-69604
                                20050301 (11)
AΙ
       US 2004-549313P
                            20040302 (60)
PRAI
       US 2004-570160P
                            20040512 (60)
DT
       Utility
       APPLICATION
LN.CNT 830
INCL
       INCLM: 423/447.200
       INCLS: 429/105.000; 204/433.000; 136/244.000
NCL
       NCLM:
              423/447.200
              136/244.000; 204/433.000; 429/105.000
       NCLS:
IC
       [7]
       ICM
              H01M008-20
       ICS
              D01F009-12; H01L025-00
              H01M0008-20 [ICM, 7]; D01F0009-12 [ICS, 7]; H01L0025-00 [ICS, 7]
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IPCR
              D01F0009-12 [I,C*]; D01F0009-12 [I,A]; H01G0009-20 [I,C*];
              H01G0009-20 [I,A]; H01L0025-00 [I,C*]; H01L0025-00 [I,A];
              H01L0051-05 [N,C*]; H01L0051-30 [N,A]; H01M0008-20 [I,C*];
               H01M0008-20 [I,A]; H01M0014-00 [I,C*]; H01M0014-00 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 24 OF 303 USPATFULL on STN
Full Text
ΑN
       2005:208427 USPATFULL
ΤI
       Production of titania
IN
       Roche, Eric Girvan, New South Wales, AUSTRALIA
       Stuart, Alan David, New South Wales, AUSTRALIA
       Grazier, Philip Ernest, New South Wales, AUSTRALIA
       Nicholson, Sarah, Queensland, AUSTRALIA
       BHP BILLITON INNOVATION PTY LTD. (non-U.S. corporation)
PΑ
       US 20050180903
                           A1 20050818
PΤ
       US 7326390
                            B2 20080205
       US 2005-107687
                            A1 20050415 (11)
AΙ
       Continuation-in-part of Ser. No. WO 2003-AU401421, filed on 17 Oct 2003,
RLI
       UNKNOWN
DT
       Utility
       APPLICATION
FS
LN.CNT 954
INCL
       INCLM: 423/086.000
NCL
              423/082.000; 423/086.000
              423/085.000; 423/086.000; 423/610.000; 423/615.000; 423/616.000
       NCLS:
TC
       [7]
       ICM
              C01G023-047
               C01G0023-047 [ICM,7]; C01G0023-00 [ICM,7,C*]
       IPCI
       IPCI-2 C01G0023-02 [I,A]; C01G0023-00 [I,C*]
              C01G0023-00 [I,C]; C01G0023-02 [I,A]; C01G0023-00 [I,A];
       IPCR
               C01G0023-047 [I,A]; C01G0023-053 [I,A]; C22B0003-00 [I,C*];
              C22B0003-00 [I,A]; C22B0003-08 [I,A]; C22B0003-44 [I,A];
               C22B0034-00 [I,C*]; C22B0034-12 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 25 OF 303 USPATFULL on STN
Full Text
ΑN
       2005:195870 USPATFULL
       Method of inhibiting oxidation, water capable of inhibiting oxidation
ΤI
       and use thereof
       Yanagihara, Tomoyuki, Kanagawa, JAPAN
ΤN
       Satoh, Bunpei, Kanagawa, JAPAN
       Shudo, Tatsuya, Kanagawa, JAPAN
       US 20050170011
                            A1 20050804
PΤ
       US 2003-512382
                            A1 20030425 (10)
AΙ
       WO 2003-JP5386
                                 20030425
                            20020426
       JP 2002-125986
PRAI
       JP 2003-6560
                            20020628
       JP 2003-2002381774 20021227
DT
       Utility
       APPLICATION
LN.CNT 5201
INCL
       INCLM: 424/600.000
NCL
       NCLM: 424/600.000
IC
       [7]
       ICM
              A61K033-00
       IPCI
              A61K0033-00 [ICM, 7]
              A61P0039-00 [I,C*]; A61P0039-06 [I,A]; C02F0001-461 [N,C*]; C02F0001-467 [N,A]; C02F0001-70 [I,C*]; C02F0001-70 [I,A]
       IPCR
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L9
     ANSWER 26 OF 303 USPATFULL on STN
Full Text
       2005:177304 USPATFULL
ΑN
       Identifying inhibitors of intracellular protein fibrillization
TΙ
       Kuret, Jeff, Dublin, OH, UNITED STATES
Chirita, Carmen N., Dublin, OH, UNITED STATES
IN
       Necula, Mihaela, Columbus, OH, UNITED STATES
       The Ohio State University Research Foundation, Columbus, OH, UNITED
PA
       STATES (U.S. corporation)
PΤ
       US 20050153384
                           A1 20050714
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US 7172875
                             B2 20070206
       US 2004-783795
                             A1 20040218 (10)
ΑТ
PRAI
       US 2004-536324P
                             20040113 (60)
DT
       Utility
FS
       APPLICATION
LN.CNT 1576
INCL
       INCLM: 435/023.000
       NCLM: 435/007.100; 435/023.000
NCL
IC
       [7]
       ICM
               G01N033-53
       ICS
               C12Q001-37
               G01N0033-53 [ICM, 7]; C12Q0001-37 [ICS, 7]
       IPCI
       IPCI-2 G01N0033-53 [I,A]
       IPCR
               G01N0033-53 [I,C]; G01N0033-53 [I,A]; C12Q0001-37 [I,C*];
               C12Q0001-37 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L9
     ANSWER 27 OF 303 USPATFULL on STN
Full Text
       2005:98840 USPATFULL
ΑN
       High capacity alkaline cells
Boone, David, Oregon, WI, UNITED STATES
ΤI
TN
       Bushong, William C., Madison, WI, UNITED STATES
       Cheeseman, Paul, Madison, WI, UNITED STATES
       Davidson, Gregory J., Oregon, WI, UNITED STATES
       Destephen, Mario, Madison, WI, UNITED STATES
       Jin, Zihong, Cottage Grove, WI, UNITED STATES
       Luecke, Jon, Madison, WI, UNITED STATES
       Mortensen, Erik, Sun Prarie, WI, UNITED STATES Ndzebet, Ernest, Madison, WI, UNITED STATES
       Ramaswami, Karthik, Middleton, WI, UNITED STATES
       Sazhin, Sergey, Madison, WI, UNITED STATES
       Vu, Viet H., Verona, WI, UNITED STATES
                             A1 20050421
A1 20040809 (10)
       US 20050084755
PΙ
       US 2004-914958
ΑТ
PRAI
       US 2003-493695P
                             20030808 (60)
       US 2003-528414P
                             20031210 (60)
       US 2004-577292P
                             20040604 (60)
       Utility
DT
FS
       APPLICATION
LN.CNT 2647
       INCLM: 429/220.000
TNCL
       INCLS: 429/218.100
NCL
       NCLM:
              429/220.000
              429/218.100
       NCLS:
       [7]
IC
       ICM
               H01M004-48
       ICS
               H01M004-58
               H01M0004-48 [ICM, 7]; H01M0004-58 [ICS, 7]
       IPCI
               H01M0004-48 [I,C*]; H01M0004-48 [I,A]; H01M0004-58 [I,C*];
       IPCR
               H01M0004-58 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L9
     ANSWER 28 OF 303 USPATFULL on STN
Full Text
       2005:37513 USPATFULL
ΑN
       Products containing quantum of bioparticles and method for production
ΤT
       Vesey, Graham, Hornsby, AUSTRALIA
Gauci, Mark, French Forest, AUSTRALIA
IN
       US 20050032192
                             A1 20050210
PΙ
       US 7374904
                             В2
                                 20080520
       US 2004-488683
                                 20040922 (10)
                             A1
       WO 2002-AU1216
                                  20020904
                             20010905
PRAT
       AU 2001-7505
DT
       Utility
       APPLICATION
LN.CNT 1515
       INCLM: 435/252.100
INCL
       INCLS: 435/252.310; 435/252.330
NCL
              435/030.000; 435/252.100
              435/004.000; 435/007.320; 435/029.000; 435/252.310; 435/252.330
       NCLS:
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IC
       [7]
       ICM
              C12N001-20
       IPCI
              C12N0001-20 [ICM, 7]
       IPCI-2 C12Q0001-24 [I,A]
              G01N0033-50 [I,C*]; G01N0033-50 [I,A]; C12N0001-00 [I,C*];
       IPCR
              C12N0001-00 [I,A]; C12N0001-04 [I,C*]; C12N0001-04 [I,A]; C12N0001-20 [I,C*]; C12N0001-20 [I,C*];
              C12Q0001-00 [I,A]; C12Q0001-02 [I,C*]; C12Q0001-02 [I,A];
              G01N0033-48 [I,C*]; G01N0033-48 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 29 OF 303 USPATFULL on STN
T.9
     Text
Full
       2005:28055 USPATFULL
ΑN
ΤI
       High performance CT reflector for a scintillator array and method for
       making same
IN
       Wei, Chang, Niskayuna, NY, UNITED STATES
       Lyons, Robert Joseph, Burnt Hills, NY, UNITED STATES
       Hart, Richard Louis, Albany, NY, UNITED STATES
       Echeverry, Jaime Andres, Troy, NY, UNITED STATES
       Lin, Wendy Wen-Ling, Niskayuna, NY, UNITED STATES
       US 20050023472
                            A1 20050203
PΤ
       US 7164134
                            В2
                                20070116
       US 2003-632277
ΑI
                            A1 20030801 (10)
       Utility
DT
       APPLICATION
FS
LN.CNT 536
INCL
       INCLM: 250/368.000
NCL
       NCLM:
              250/368.000
              250/370.110; 378/019.000; 378/098.800
       NCLS:
IC
       [7]
       ICM
              G01T001-20
       IPCI
              G01T0001-20 [ICM, 7]; G01T0001-00 [ICM, 7, C*]
       IPCI-2 G01T0001-202 [I,A]; G01T0001-24 [I,A]; G01T0001-00 [I,C*];
              G01N0023-083 [I,A]; G01N0023-02 [I,C*]; H05G0001-64 [I,A];
              H05G0001-00 [I,C*]
              G01T0001-00 [I,C*]; G01T0001-20 [I,A]; G01T0001-00 [I,C];
       IPCR
              G01T0001-202 [I,A]; G01N0023-02 [I,C]; G01N0023-083 [I,A];
              G01T0001-24 [I,A]; H05G0001-00 [I,C]; H05G0001-64 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 30 OF 303 USPATFULL on STN
L9
     Text
Full
ΑN
       2005:27831 USPATFULL
       Method and apparatus for forming gold plating
ΤI
       Ichimura, Masaya, Nagoya-shi, JAPAN
TN
       Masui, Kanji, Okazaki-shi, JAPAN
PA
       Kabushiki Kaisha Tokai Rika Denki Seisakusho (non-U.S. corporation)
                            A1 20050203
PΤ
       US 20050023248
       US 2004-895498
                                20040721 (10)
ΑТ
                            A 1
       JP 2003-280964
                            20030728
PRAI
       JP 2004-210430
                            20040716
DT
       Utility
       APPLICATION
FS
LN.CNT 461
       INCLM: 216/087.000
INCL
       INCLS: 427/558.000; 427/443.100; 427/581.000
NCL
       NCLM:
              216/087.000
       NCLS:
              427/443.100; 427/558.000; 427/581.000
IC
       [7]
       ICM
              C23F001-00
       ICS
              B05D005-12
       IPCI
              C23F0001-00 [ICM, 7]; B05D0005-12 [ICS, 7]
              C23C0018-31 [I,C*]; C23C0018-44 [I,A]; C23C0018-00 [I,C*];
       IPCR
              C23C0018-14 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 31 OF 303 USPATFULL on STN
L9
Full Text
       2004:313878 USPATFULL
ΑN
ΤI
       Oligomers and polymers containing sulfonite groups and method for the
       production thereof
```

```
Haring, Thomas, Stuttgart, GERMANY, FEDERAL REPUBLIC OF
IN
       Kerres, Jochen, Ostfildern, GERMANY, FEDERAL REPUBLIC OF
       Zhang, Wei, Stuttgart, GERMANY, FEDERAL REPUBLIC OF
       US 20040247548
PΙ
                            Α1
                                20041209
       US 7202327
                            В2
                                 20070410
       US 2004-488420
                                 20040722 (10)
AΙ
                            Α1
       WO 2002-DE3260
                                 20020902
       DE 2001-10142573
                            20010901
PRAI
DT
       Utility
       APPLICATION
LN.CNT 665
       INCLM: 424/070.110
INCL
       INCLS: 526/287.000
NCL
       NCLM:
              528/391.000; 424/070.110
              424/070.110; 429/122.000; 525/535.000; 526/287.000; 528/373.000
       NCLS:
IC
       [7]
       ICM
              A61K007-06
       ICS
              A61K007-11; C08F028-02
       IPCI
              A61K0007-06 [ICM,7]; A61K0007-11 [ICS,7]; C08F0028-02 [ICS,7];
              C08F0028-00 [ICS,7,C*]
       B01D0053-22 [I,C*]; B01D0053-22 [I,A]; B01D0061-36 [I,C*];
       IPCR
              B01D0061-36 [I,A]; B01D0071-00 [I,C*]; B01D0071-82 [I,A];
              C08C0019-00 [I,C*]; C08C0019-02 [I,A]; C08F0008-00 [I,C*];
              C08F0008-04 [I,A]; C08G0085-00 [I,C*]; C08G0085-00 [I,A];
              C08J0005-20 [I,C*]; C08J0005-22 [I,A]; H01B0001-06 [I,C*];
              H01B0001-06 [I,A]; H01B0013-00 [I,C*]; H01B0013-00 [I,A]; H01M0006-18 [I,C*]; H01M0006-18 [I,C*]; H01M0008-02 [I,C*]; H01M0008-02 [I,A]; H01M0008-10 [I,C*];
              H01M0010-36 [I,C*]; H01M0010-40 [I,A]; C08G0075-00 [I,C];
              C08G0075-00 [I,A]; C08F0028-00 [I,C]; C08F0028-02 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 32 OF 303 USPATFULL on STN
1.9
Full Text
       2004:267171 USPATFULL
ΑN
ΤT
       In-situ process for detoxifying hexavalent chromium in soil and
       groundwat.er
       Yen, Chen-Yu, Phoenix, MD, UNITED STATES
IN
PA
       Gannett Fleming, Inc. (U.S. corporation)
PΙ
       US 20040208705
                            A1 20041021
       US 6955501
                            В2
                                 20051018
       US 2004-844864
                            A1 20040513 (10)
AΙ
       Continuation of Ser. No. US 2002-235984, filed on 5 Sep 2002, GRANTED,
RLI
       Pat. No. US 6758633
       US 2001-317786P
                            20010906 (60)
PRAI
DT
       Utility
FS
       APPLICATION
LN.CNT 1231
INCL
       INCLM: 405/128.500
NCL
       NCLM:
              405/128.750; 405/128.500
              405/128.250
       NCLS:
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              B09C001-00
       IPCI
              B09C0001-00 [ICM, 7]
       IPCI-2 B09B0001-00 [ICM, 7]
              B09C0001-00 [I,C*]; B09C0001-00 [I,A]; B09C0001-08 [I,A]; B09C0001-10 [I,C*]; B09C0001-10 [I,C*];
              C02F0001-70 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d his
     (FILE 'HOME' ENTERED AT 02:17:12 ON 15 AUG 2008)
     FILE 'REGISTRY' ENTERED AT 02:17:57 ON 15 AUG 2008
                E THIOHYDANTOIN/CN
L1
               1 S E3
     FILE 'USPATFULL, USPATOLD, USPAT2' ENTERED AT 02:24:06 ON 15 AUG 2008
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L2
             3644 S (SHAVING GEL OR SHAVING CREAM OR SHAVING FOAM)
L3
               431 S (SHAVING GEL OR SHAVING CREAM OR SHAVING FOAM)/CLM
L4
          1654032 S (REDUCT?)
L5
           133396 S (REDUCT?)/CLM
            33599 S (THIOSULFATE)
L6
             3053 S (THIOSULFATE)/CLM
L7
            20621 S L4 AND L6
L8
               303 S L5 AND L7
L9
L10
                32 S L2 AND L8
L11
                 1 S L3 AND L9
=> d 110 1-32
L10 ANSWER 1 OF 32 USPATFULL on STN
Full Text
        2008:151098 USPATFULL
ΑN
ΤI
        BLOCK POLYMERS, COMPOSITIONS AND METHODS OF USE FOR FOAMS, LAUNDRY
        DETERGENTS, SHOWER RINSES AND COAGULANTS
ΙN
        YEUNG, Dominic Wai-Kwing, Ontario, CANADA
        Bergeron, Vance, Antony, FRANCE
        Bodet, Jean-Francois, Mason, OH, UNITED STATES
Sivik, Mark Robert, Ft. Mitchell, KY, UNITED STATES
Kluesener, Bernard William, Harrison, OH, UNITED STATES
        Scheper, William Michael, Lawrenceburg, IN, UNITED STATES
        Rhodia Inc., Cranbury, NJ, UNITED STATES (U.S. corporation)
PA
                                 A1 20080605
        US 20080131393
PΙ
        US 2007-966675
                                 A1 20071228 (11)
ΑI
        Division of Ser. No. US 2005-25967, filed on 3 Jan 2005, Pat. No. US 7335700 Continuation of Ser. No. US 2000-698149, filed on 30 Oct 2000,
RLI
        Pat. No. US 6864314 Continuation-in-part of Ser. No. US 1999-318942,
        filed on 26 May 1999, ABANDONED
DT
        Utility
FS
        APPLICATION
LN.CNT 4665
        INCLM: 424/070.110
TNCL
        INCLS: 526/319.000; 526/307.000; 526/260.000; 526/258.000; 510/130.000; 510/119.000; 510/159.000; 510/127.000; 510/122.000; 510/356.000; 510/350.000; 521/149.000; 514/772.600; 514/772.500; 514/772.400;
                 252 3; 510/109.000; 507/118.000; 162/168.100
NCL
                 424/070.110
        NCLM:
                 162/168.100; 252/003.000; 507/118.000; 510/109.000; 510/119.000;
        NCLS:
                 510/122.000; 510/127.000; 510/130.000; 510/159.000; 510/350.000; 510/356.000; 514/772.400; 514/772.500; 514/772.600; 521/149.000; 526/258.000; 526/260.000; 526/307.000; 526/319.000 A61K0008-81 [I,A]; C08F0120-34 [I,A]; A61K0008-89 [I,A];
IC
        IPCI
                 A61K0008-72 [I,C*]; A62D0001-00 [I,A]; C09K0008-24 [I,A];
                 C09K0008-02 [I,C*]; A61Q0005-02 [I,A]; A61Q0019-10 [I,A];
                 A61Q0009-02 [I,A]; A61K0047-32 [I,A]; C11D0003-37 [I,A];
                 C08F0120-60 [I,A]; C08F0120-00 [I,C*]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 2 OF 32 USPATFULL on STN
Full Text
ΑN
        2007:314822 USPATFULL
ΤI
        NEW COSMETIC, PERSONAL CARE, CLEANING AGENT, AND NUTRITIONAL SUPPLEMENT
        COMPOSITIONS AND METHODS OF MAKING AND USING SAME
        Lee, Sean, Karlsruhe, GERMANY, FEDERAL REPUBLIC OF
TN
        Kessler, Susanna, Ergolding, GERMANY, FEDERAL REPUBLIC OF
        Forberich, Oliver, Oberursel, GERMANY, FEDERAL REPUBLIC OF
        Buchwar, Claire, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF
        Greenspan, David C., Gainesville, FL, UNITED STATES
        SCHOTT AG, MAINZ, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)
PΑ
PΙ
        US 20070275021
                                 A1 20071129
        US 2007-775615
                                 A1 20070710 (11)
AΙ
        Division of Ser. No. US 2001-818466, filed on 27 Mar 2001, GRANTED, Pat.
RLT
        No. US 7250174 Continuation-in-part of Ser. No. US 1999-456196, filed on
        7 Dec 1999, ABANDONED Continuation—in—part of Ser. No. US 1999-456195, filed on 7 Dec 1999, ABANDONED US 2000-192216P 20000327 (60)
PRAI
        US 2000-197162P
                                 20000414 (60)
DT
        Utility
FS
        APPLICATION
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LN.CNT 4111
       INCLM: 424/401.000
TNCL
       INCLS: 424/059.000; 424/065.000; 424/070.100; 424/724.000; 510/511.000
NCL
       NCLM:
               424/401.000
       NCLS:
               424/059.000; 424/065.000; 424/070.100; 424/724.000; 510/511.000
               A61K0033-00 [I,A]; A61K0008-25 [I,A]; A61K0008-19 [I,C*];
IC
       IPCI
               A61Q0017-04 [I,A]
               A61K0033-00 [I,C]; A61K0033-00 [I,A]; A61K0008-19 [I,C];
       IPCR
               A61K0008-22 [I,A]; A61K0008-25 [I,A]; A61Q0001-02 [I,C*];
               A61Q0001-02 [I,A]; A61Q0001-06 [I,A]; A61Q0003-00 [I,C*];
               A61Q0003-00 [I,A]; A61Q0005-02 [I,C*]; A61Q0005-02 [I,A];
               A61Q0009-02 [I,C*]; A61Q0009-02 [I,A]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,A]; A61Q0015-00 [I,C*]; A61Q0015-00 [I,A];
               A61Q0017-04 [I,C]; A61Q0017-04 [I,A]; A61Q0019-00 [I,C*];
               A61Q0019-00 [I,A]; A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 3 OF 32 USPATFULL on STN
Full Text
ΑN
       2006:130742 USPATFULL
       Linkage of agents using microparticles
ΤT
       Green, Howard, Brookline, MA, UNITED STATES
Compton, Bruce J., Lexington, MA, UNITED STATES
TN
       Corey, George D., Newton, MA, UNITED STATES
       Djian, Philippe, Paris, FRANCE
       Pericor Science, Inc., Boston, MA, UNITED STATES (U.S. corporation)
PA
                            A1 20060525
       US 20060110379
PΙ
                            A1 20050510 (11)
ΑI
       US 2005-125830
       Continuation of Ser. No. US 2000-620783, filed on 21 Jul 2000, GRANTED,
RLI
       Pat. No. US 6958148 Continuation-in-part of Ser. No. US 1999-359920,
       filed on 22 Jul 1999, GRANTED, Pat. No. US 6919076 Continuation-in-part
       of Ser. No. US 1999-234358, filed on 20 Jan 1999, GRANTED, Pat. No. US
       6267957
       US 1998-71908P
                             19980120 (60)
PRAI
       Utility
DT
FS
       APPLICATION
LN.CNT 4053
TNCL
       INCLM: 424/094.500
       INCLS: 424/489.000; 977/906.000
              424/094.500
NCL
       NCLM:
               424/489.000; 977/906.000
       NCLS:
               A61K0038-48 [I,A]; A61K0038-43 [I,C*]; A61K0009-14 [I,A]
       IPCI
TC
               A61K0038-43 [I,C]; A61K0038-48 [I,A]; A61K0009-14 [I,C];
               A61K0009-14 [I,A]; A61K0038-00 [I,C*]; A61K0038-00 [I,A]; A61K0038-45 [I,A]; C07K0017-00 [I,C*]; C07K0017-02 [I,A];
               C07K0017-08 [I,A]; C12N0011-00 [I,C*]; C12N0011-02 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 4 OF 32 USPATFULL on STN
Full Text
       2006:64424 USPATFULL
ΑN
ΤI
       Packaging container for discharge of plurality of contents, packaging
       product including the packaging container and process for producing the
       packaging product
       Mekata, Šatoshi, Osaka, JAPAN
ΙN
       US 20060054634
PΙ
                             A1 20060316
                                 20030626 (10)
ΑI
       US 2003-518696
                             A1
       WO 2003-JP8074
                                 20030626
                                 20050721 PCT 371 date
       JP 2002-186671
                             20020626
PRAI
       JP 2002-307654
                             20020913
       JP 2003-45109
                             20030221
       JP 2003-105918
                             20030409
       Utility
DT
       APPLICATION
FS
LN.CNT 3099
INCL
       INCLM: 222/094.000
               222/094.000
NCL
       NCLM:
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       IPCI
               B65D0035-22 [I,A]; B65D0035-00 [I,C*]
               B65D0035-00 [I,C]; B65D0035-22 [I,A]; A45D0019-00 [N,C*];
       IPCR
               A45D0019-00 [N,A]; B05B0011-00 [I,C*]; B05B0011-00 [I,A];
               B65D0083-14 [I,C*]; B65D0083-14 [I,A]; B65D0083-16 [I,C*];
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B65D0083-16 [I,A]

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L10 ANSWER 5 OF 32 USPATFULL on STN
Full Text
ΑN
        2005:270526 USPATFULL
        Linkage of agents to body tissue using microparticles and
TΙ
        transglutaminase
        Green, Howard, Brookline, MA, UNITED STATES
ΤN
        Compton, Bruce J., Lexington, MA, UNITED STATES
        Corey, George D., Newton, MA, UNITED STATES
        Djian, Philippe, Paris, FRANCE
PA
        Pericor Science, Inc., Boston, MA, UNITED STATES (U.S. corporation)
        US 6958148
                              B1 20051025
PΙ
AΙ
        US 2000-620783
                                   20000721 (9)
        Continuation-in-part of Ser. No. US 1999-359920, filed on 22 Jul 1999,
RLI
        PENDING Continuation-in-part of Ser. No. US 1999-234358, filed on 20 Jan
        1999, Pat. No. US 6267957
PRAI
        US 1998-71908P
                               19980120 (60)
DT
        Utility
FS
        GRANTED
LN.CNT 4173
INCL
        INCLM: 424/094.500
        INCLS: 424/059.000; 424/094.630; 424/401.000; 435/016.000; 435/177.000;
                435/193.000; 514/002.000; 530/402.000; 530/812.000
NCL
                424/094.500
        NCLS:
                424/059.000; 424/094.630; 424/401.000; 435/016.000; 435/177.000;
                435/193.000; 514/002.000; 530/402.000; 530/812.000
IC
        [7]
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                A61K038-45
        ICS
                A61K038-48; A61K038-00; C12N011-02; C07K017-02
                A61K0038-45 [ICM,7]; A61K0038-48 [ICS,7]; A61K0038-43 [ICS,7,C*];
        TPCT
                A61K0038-00 [ICS,7]; C12N0011-02 [ICS,7]; C12N0011-00 [ICS,7,C*];
                C07K0017-02 [ICS,7]; C07K0017-00 [ICS,7,C*]
                A61K0047-42 [I,C*]; A61K0047-42 [I,A]; A01N0025-10 [I,C*];
        IPCR
               A01N0025-10 [I,A]; A01N0025-12 [I,C*]; A01N0025-12 [I,A]; A01N0025-24 [I,C*]; A01N0025-24 [I,C*]; A01N0037-18 [I,C*]; A01N0037-18 [I,A]; A61K0008-00 [I,C*]; A61K0008-00 [I,A]; A61K0008-30 [I,C*]; A61K0008-44 [I,A]; A61K0009-14 [I,C*];
                A61K0009-14 [I,A]; A61K0009-16 [I,C*]; A61K0009-16 [I,A];
                A61K0038-00 [I,C*]; A61K0038-00 [I,A]; A61K0038-43 [I,C*];
                A61K0038-45 [I,A]; A61K0038-48 [I,A]; A61K0047-32 [I,C*];
                A61K0047-32 [I,A]; A61P0039-00 [I,C*]; A61P0039-02 [I,A];
               A61Q0005-00 [I,C*]; A61Q0005-00 [I,A]; A61Q0005-06 [I,C*]; A61Q0005-06 [I,A]; A61Q0009-04 [I,C*]; A61Q0009-04 [I,C*]; A61Q0017-04 [I,C*]; A61Q0017-04 [I,C*]; A61Q0017-09 [I,C*];
                C07K0017-02 [I,A]; C07K0017-08 [I,A]; C12N0011-00 [I,C*];
                C12N0011-02 [I,A]
EXF
        424/94.5; 424/94.63; 424/401; 424/59; 435/16; 435/177; 435/193; 514/2;
        530/403; 530/812
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 6 OF 32 USPATFULL on STN
Full Text
ΑN
        2005:131808 USPATFULL
        Block polymers, compositions and methods of use for foams, laundry
ΤI
        detergents, shower rinses and coagulants
        Yeung, Dominic Wai-Kwing, Mississauga, CANADA
TN
        Bergeron, Vance, Antony, FRANCE
        Bodet, Jean-Francois, Mason, OH, UNITED STATES
        Sivik, Mark Robert, Ft. Mitchell, KY, UNITED STATES Kluesener, Bernard William, Harrison, OH, UNITED STATES
        Scheper, William Michael, Lawrenceburg, IN, UNITED STATES
PΑ
        RHODIA, INC., Cranbury, NJ, UNITED STATES, 08512 (non-U.S. corporation)
        US 20050113272
PΤ
                              A1 20050526
        US 7335700
                              B2 20080226
AΙ
        US 2005-25967
                              A1 20050103 (11)
        Continuation of Ser. No. US 2000-698149, filed on 30 Oct 2000, GRANTED,
RLI
        Pat. No. US 6864314 Continuation-in-part of Ser. No. US 1999-318942,
        filed on 26 May 1999, ABANDONED
DT
        Utility
FS
        APPLICATION
LN.CNT 4478
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INCL
        INCLM: 510/235.000
NCL
                525/091.000; 510/235.000
        NCLS:
                524/762.000; 524/808.000; 525/089.000; 525/329.200; 525/330.500
TC
        [7]
        ICM
                C11D001-00
        IPCI
                C11D0001-00 [ICM, 7]
        IPCI-2 C08F0012-28 [I,A]; C08F0012-00 [I,C*]; C08K0005-16 [I,A];
                C08K0005-00 [I,C*]
        IPCR
                C08F0012-00 [I,C]; C08F0012-28 [I,A]; A61K0008-72 [I,C*];
                A61K0008-90 [I,A]; A61Q0005-02 [I,C*]; A61Q0005-02 [I,A];
                A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]; C08F0220-00 [I,C*];
                C08F0220-34 [I,A]; C08F0293-00 [I,C*]; C08F0293-00 [I,A];
                C08K0005-00 [I,C]; C08K0005-16 [I,A]; C08L0053-00 [I,C*];
                              [I,A]; C11D0001-00 [I,C*]; C11D0001-00 [I,A]; [I,C*]; C11D0003-37 [I,A]; D21H0021-10 [I,C*];
                C08L0053-00
                C11D0003-37
                D21H0021-10 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 7 OF 32 USPATFULL on STN
Full Text
ΑN
        2005:59196 USPATFULL
        Block polymers, compositions and methods of use for foams, laundry
ΤI
        detergents, shower rinses and coagulants
IN
        Yeung, Dominic Wai-Kwing, 3661 Golden Orchard Drive, Mississauga,
        Ontario, CANADA L4Y 3J2
        Bergeron, Vance, 118 rue Saint Exupery, Antony, FRANCE 92160
        Bodet, Jean-Francois, 5067 Plantation Ct., Mason, OH, United States
        45040
        Sivik, Mark Robert, 2434 Sheffield Ct., Ft. Mitchell, KY, United States
        41014
        Kluesener, Bernard William, 11619 New Biddinger Rd., Harrison, OH,
        United States 45030
        Scheper, William Michael, 2393 Picnic Woods Dr., Lawrenceburg, IN,
        United States 47025
PΙ
        US 6864314
                               В1
                                    20050308
ΑI
        US 2000-698149
                                    20001030 (9)
        Continuation-in-part of Ser. No. US 1999-318942, filed on 26 May 1999,
RLI
        now abandoned
DT
        Utility
        GRANTED
FS
LN.CNT 4704
        INCLM: 525/091.000
INCL
        INCLS: 525/089.000; 525/230.000; 525/329.900; 525/330.500; 524/762.000; 524/808.000; 524/815.000; 523/418.000; 523/429.000; 521/030.000; 521/031.000; 521/032.000; 526/310.000; 526/312.000; 526/320.000;
                526/323.000; 424/070.270
                525/091.000
NCL
        NCLM:
                424/070.270; 521/030.000; 521/031.000; 521/032.000; 523/418.000;
        NCLS:
                523/429.000; 524/762.000; 524/808.000; 524/815.000; 525/089.000; 525/230.000; 525/329.900; 525/330.500; 526/310.000; 526/312.000;
                526/320.000; 526/323.000
IC
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                C08F012-28
        ICS
                C08K005-16; A61K007-11
        IPCI
                C08F0012-28 [ICM,7]; C08F0012-00 [ICM,7,C*]; C08K0005-16 [ICS,7];
                C08K0005-00 [ICS, 7, C*]; A61K0007-11 [ICS, 7]
        IPCR
                A01C0001-00 [I,C*]; A01C0001-08 [I,A]; A01N0025-16 [I,C*];
                A01N0025-16 [I,A]; A61K0008-00 [I,C*]; A61K0008-00 [I,A]; A61K0008-30 [I,C*]; A61K0008-37 [I,A]; A61K0008-46 [I,A]; A61K0008-72 [I,C*]; A61K0008-89 [I,A];
                A61K0008-891 [I,A]; A61K0008-90 [I,A]; A61Q0005-02 [I,C*];
                A61Q0005-02 [I,A]; A61Q0019-10 [I,C*]; A61Q0019-10 [I,A];
                A62D0001-00 [I,C*]; A62D0001-02 [I,A]; A62D0001-04 [I,A];
                C08F0012-00 [I,C*]; C08F0012-28 [I,A]; C08F0220-00 [I,C*];
                C08F0220-34 [I,A]; C08F0293-00 [I,C*]; C08F0293-00 [I,A];
                C08K0005-00 [I,C*]; C08K0005-16 [I,A]; C08L0053-00 [I,C*];
                C08L0053-00 [I,A]; C11D0001-66 [I,C*]; C11D0001-66 [I,A]; C11D0001-88 [I,C*]; C11D0001-88 [I,A]; C11D0003-00 [I,C*];
                C11D0003-00 [I,A]; C11D0003-37 [I,C*]; C11D0003-37 [I,A];
                C11D0003-39 [I,C*]; C11D0003-39 [I,A]; C11D0003-395 [I,C*];
                C11D0003-395 [I,A]; C11D0003-40 [I,C*]; C11D0003-42 [I,A];
                D06L0001-00 [I,C*]; D06L0001-12 [I,A]; D21H0017-00 [I,C*];
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D21H0017-45 [I,A]; D21H0021-10 [I,C*]; D21H0021-10 [I,A]
EXF
       525/91; 525/89; 525/230; 525/329.9; 525/330.5; 524/762; 524/808;
       524/815; 524/820; 523/418; 523/429; 521/30; 521/31; 521/32; 526/310;
       526/312; 526/320; 526/323; 424/70.27
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 8 OF 32 USPATFULL on STN
Full Text
ΑN
       2004:214981 USPATFULL
ΤI
       Shave gel products
       Manivannan, Gurusamy, Maryland Heights, MO, UNITED STATES
IN
       Novikov, Alexander, Framingham, MA, UNITED STATES
       Thong, Stephen, Needham, MA, UNITED STATES Barnet, Alfred, Hingham, MA, UNITED STATES
       Xu, Yun, Andover, MA, UNITED STATES
       McLaughlin, Ronald, Medford, MA, UNITED STATES
PΙ
       US 20040166086
                           A1 20040826
       US 2003-720531
                           A1
                                20031125 (10)
AΙ
       Continuation-in-part of Ser. No. US 2003-371619, filed on 21 Feb 2003,
RLI
       PENDING
DT
       Utility
FS
       APPLICATION
LN.CNT 708
INCL
       INCLM: 424/073.000
NCL
       NCLM:
             424/073.000
IC
       [7]
              A61K007-15
       ICM
              A61K0007-15 [ICM, 7]
       IPCI
              A61K0008-04 [I,C*]; A61K0008-04 [I,A]; A61K0008-19 [I,C*];
       TPCR
                           [I,A]; A61K0008-30 [I,C*]; A61K0008-46 [I,A];
              A61K0008-22
              A61Q0009-02 [I,C*]; A61Q0009-02 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 9 OF 32 USPATFULL on STN
Full Text
ΑN
       2004:214980 USPATFULL
ΤI
       Shave gel compositions
       Manivannan, Gurusamy, North Chelmsford, MA, UNITED STATES
TM
       Novikov, Alexander, Framingham, MA, UNITED STATES
       Thong, Stephen, Needham, MA, UNITED STATES
       Barnet, Alfred, Hingham, MA, UNITED STATES
       Xu, Yun, Andover, MA, UNITED STATES
                           A1 20040826
A1 20030221 (10)
PΙ
       US 20040166085
ΑI
       US 2003-371619
DT
       Utility
       APPLICATION
FS
LN.CNT 596
INCL
       INCLM: 424/073.000
       NCLM: 424/073.000
NCL
IC
       [7]
       ICM
              A61K007-15
       IPCI
              A61K0007-15 [ICM, 7]
              A61K0008-04 [I,C*]; A61K0008-04 [I,A]; A61K0008-19 [I,C*];
       IPCR
              A61K0008-22 [I,A]; A61K0008-30 [I,C*]; A61K0008-46 [I,A];
              A61Q0009-02 [I,C*]; A61Q0009-02 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 10 OF 32 USPATFULL on STN
Full Text
       2002:294312 USPATFULL
AN
       External compositions for skin comprising sphingoglycolipid
ΤI
IN
       Murata, Katsumi, Tokyo, JAPAN
       Nozawa, Takashi, Tokyo, JAPAN
       Hara, Hisako, Tokyo, JAPAN
       Asai, Michiki, Tokyo, JAPAN
       Wakayama, Sachio, Tokyo, JAPAN
       KIBUN FOOD CHEMIFA CO., LTD., Minato-ku, Tokyo, JAPAN, 105-0004
PA
       (non-U.S. corporation)
                                20021107
PΤ
       US 20020164351
                            A1
       US 6514744
                            B2 20030204
ΑТ
       US 2001-12510
                           A1
                                20011212 (10)
RLT
       Division of Ser. No. US 1998-84394, filed on 27 May 1998, PATENTED
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PRAI
       JP 1997-141768
                             19970530
       JP 1997-141769
                             19970530
       JP 1997-141770
                             19970530
                             19970530
       JP 1997-141771
       JP 1998-9963
                             19980121
       JP 1998-61749
                             19980312
DT
       Utility
FS
       APPLICATION
LN.CNT 1298
INCL
       INCLM: 424/195.150
       INCLS: 435/254.100
              435/252.100; 424/195.150
NCL
       NCLM:
               435/254.100; 435/255.100
IC
        [7]
       ICM
               A61K035-84
       ICS
               C12N001-18
       IPCI
               A61K0035-84 [ICM, 7]; C12N0001-18 [ICS, 7]
       IPCI-2 C12N0001-20 [ICM, 7]; C12N0001-14 [ICS, 7]
       IPCR
               A61K0008-02 [I,C*]; A61K0008-02 [I,A]; A61K0008-30 [I,C*];
               A61K0008-68 [I,A]; A61K0008-96 [I,C*]; A61K0008-97 [I,A]; A61K0008-99 [I,A]; A61K0036-06 [I,C*]; A61K0036-06 [I,A]; A61Q0001-02 [I,C*]; A61Q0001-04 [I,A];
               A61Q0001-06 [I,A]; A61Q0001-08 [I,A]; A61Q0001-10 [I,A];
               A61Q0003-02 [I,C*]; A61Q0003-02 [I,A]; A61Q0005-00 [I,C*];
               A61Q0005-00 [I,A]; A61Q0005-02 [I,C*]; A61Q0005-02 [I,A];
               A61Q0005-10 [I,C*]; A61Q0005-10 [I,A]; A61Q0009-02 [I,C*];
               A61Q0009-02 [I,A]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,A];
                            [I,C*]; A61Q0019-00 [I,A]; A61Q0019-02 [I,C*]; [I,A]; A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]; [I,C*]; C12N0001-14 [I,A]; C12N0001-20 [I,C*];
               A6100019-00
               A61Q0019-02
               C12N0001-14
               C12N0001-20 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 11 OF 32 USPATFULL on STN
Full Text
ΑN
       2002:164425 USPATFULL
       New cosmetic, personal care, cleaning agent, and nutritional supplement
ΤI
       compositions and methods of making and using same
ΙN
       Lee, Sean, Karlsruhe, GERMANY, FEDERAL REPUBLIC OF
       Kessler, Susanna, Ergolding, GERMANY, FEDERAL REPUBLIC OF
       Forberich, Oliver, Oberursel, GERMANY, FEDERAL REPUBLIC OF
       Buchwar, Claire, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF
       Greenspan, David C., Grainsville, FL, UNITED STATES
PΙ
       US 20020086039
                             A1
                                 20020704
       US 7250174
                             В2
                                 20070731
       US 2001-818466
                             A1 20010327 (9)
ΑТ
       US 2000-192261P
                             20000327 (60)
PRAI
       US 2000-197162P
                             20000414 (60)
       Utility
DT
FS
       APPLICATION
LN.CNT 4825
INCL
       INCLM: 424/401.000
       INCLS: 424/063.000; 424/064.000
NCL
               424/401.000
       NCLM:
       NCLS:
               424/064.000; 424/069.000; 424/070.100; 424/400.000; 424/404.000;
               424/063.000
IC
        [7]
       ICM
               A61K007-021
       ICS
               A61K007-025; A61K007-00
       IPCI
               A61K0007-021 [ICM,7]; A61K0007-025 [ICS,7]; A61K0007-00 [ICS,7]
       IPCI-2 A61K0006-00 [I,A]; A61K0009-00 [I,A]; A61K0025-34 [I,A];
               A61K0008-00 [I,A]; A61K0008-18 [I,A]
       IPCR
               A61K0006-00 [I,C]; A61K0006-00 [I,A]; A61K0008-00 [I,C];
               A61K0008-00 [I,A]; A61K0008-18 [I,C]; A61K0008-18 [I,A];
               A61K0008-19 [I,C*]; A61K0008-22 [I,A]; A61K0008-25 [I,A];
               A61K0009-00 [I,C]; A61K0009-00 [I,A]; A61Q0001-02 [I,C*];
               A61Q0001-02 [I,A]; A61Q0001-06 [I,A]; A61Q0003-00 [I,C*];
               A61Q0003-00 [I,A]; A61Q0005-02 [I,C*]; A61Q0005-02 [I,A];
               A61Q0009-02 [I,C*]; A61Q0009-02 [I,A]; A61Q0011-00 [I,C*];
               A61Q0011-00 [I,A]; A61Q0015-00 [I,C*]; A61Q0015-00 [I,A];
               A61Q0017-04 [I,C*]; A61Q0017-04 [I,A]; A61Q0019-00 [I,C*];
               A61Q0019-00 [I,A]; A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]
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L10 ANSWER 12 OF 32 USPATFULL on STN
Full Text
ΑN
       2002:12038 USPATFULL
       EXTERNAL COMPOSITION FOR SKIN COMPRISING SPHINGOGLYCOLIPID
TΙ
       MURATA, KATSUMI, TOKYO, JAPAN
NOZAWA, TAKASHI, TOKYO, JAPAN
ΤN
       HARA, HISAKO, TOKYO, JAPAN
       ASAI, MICHIKI, TOKYO, JAPAN
       WAKAYAMA, SACHIO, TOKYO, JAPAN
                            A1 20020117
B2 20020219
A1 19980527
       US 20020006414
PΤ
       US 6348201
AΙ
       US 1998-84394
                                 19980527 (9)
       JP 1997-141768
                            19970530
PRAI
       JP 1997-141769
                            19970530
       JP 1997-141770
                             19970530
       JP 1997-141771
                             19970530
       JP 1998-9963
                             19980121
       JP 1998-61749
                            19980312
       Utility
DT
FS
       APPLICATION
LN.CNT 1372
INCL
       INCLM: 424/400.000
NCL
              424/401.000; 424/400.000
              435/822.000; 514/025.000; 536/017.900
       NCLS:
TC
       [7]
       ICM
              A61K009-00
       IPCI
              A61K0009-00 [ICM, 7]
       IPCI-2 A61K0007-00 [ICM, 7]
              A61K0008-02 [I,C*]; A61K0008-02 [I,A]; A61K0008-30 [I,C*];
       IPCR
              A61K0008-68 [I,A]; A61K0008-96 [I,C*]; A61K0008-97 [I,A];
              A61K0008-99 [I,A]; A61Q0001-02 [I,C*]; A61Q0001-02 [I,A];
              A61Q0001-04 [I,A]; A61Q0001-06 [I,A]; A61Q0001-08 [I,A];
              A61Q0001-10 [I,A]; A61Q0005-00 [I,C*]; A61Q0005-00 [I,A];
              A61Q0005-02 [I,C*]; A61Q0005-02 [I,A]; A61Q0005-10 [I,C*]; A61Q0005-10 [I,A]; A61Q0009-02 [I,C*]; A61Q0009-02 [I,A];
              A61Q0011-00 [I,C*]; A61Q0011-00 [I,A]; A61Q0019-00 [I,C*];
              A61Q0019-00 [I,A]; A61Q0019-02 [I,C*]; A61Q0019-02 [I,A];
              A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]; C12N0001-14 [I,C*];
              C12N0001-14 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 13 OF 32 USPATFULL on STN
Full Text
       2001:39978 USPATFULL
ΑN
       Surgery plume filter device and method of filtering
ΤI
       Skalla, Randy Marc, Leesburg, GA, United States
ΙN
       Ahrens, Carl Austin, Cincinnati, OH, United States
       Garner, Jr., Robert Keith, Miamisburg, OH, United States
       Wilkinson, Bradley Carl, Cincinnati, OH, United States
PΑ
       EnviroSurgical, Inc., Cincinnati, OH, United States (U.S. corporation)
PΤ
       US 6203762
                            В1
                                20010320
       US 1999-327023
                                 19990607 (9)
AΙ
RLI
       Continuation of Ser. No. US 1996-657156, filed on 3 Jun 1996, now
       patented, Pat. No. US 5910291 Continuation-in-part of Ser. No. US
       1994-198480, filed on 18 Feb 1994, now patented, Pat. No. US 5522808
       Division of Ser. No. US 1992-851862, filed on 16 Mar 1992, now patented,
       Pat. No. US 5288469
DT
       Utility
FS
       Granted
LN.CNT 1095
INCL
       INCLM: 422/171.000
       INCLS: 422/169.000; 422/170.000; 422/122.000; 096/134.000; 096/341.000;
               261/DIG.026
NCL
       NCLM:
               422/171.000
       NCLS:
               096/134.000; 096/341.000; 261/DIG.026; 422/122.000; 422/169.000;
               422/170.000
IC
       [7]
       ICM
              B01D050-00
       ICS
              B01D053-00; A61L009-00
       IPCI
              B01D0050-00 [ICM, 7]; B01D0053-00 [ICS, 7]; A61L0009-00 [ICS, 7]
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IPCR
              A61B0018-00 [I,A]; A61B0018-00 [I,C*]; A61L0009-16 [I,A];
              A61L0009-16 [I,C*]; B01D0046-24 [I,A]; B01D0046-24 [I,C*];
              B01D0053-04 [I,A]; B01D0053-04 [I,C*]; B01D0053-46 [I,C*];
              B01D0053-54 [I,C*]; B01D0053-58 [I,A]; B01D0053-72 [I,A]
       422/168-171; 422/4; 422/5; 422/122; 261/DIG.26; 096/134; 096/150; 096/341; 096/178; 096/246; 096/253
EXF
L10 ANSWER 14 OF 32 USPATFULL on STN
Full Text
ΑN
       1999:85240 USPATFULL
       Protocol for simulated natural biofilm formation
ΤI
ΙN
       Bakich, Shannon L., Racine, WI, United States
       Gipp, Mark M., Mount Pleasant, WI, United States
PA
       S.C. Johnson & Son, Inc., Racine, WI, United States (U.S. corporation)
       US 5928889
PΙ
                                19990727
       US 1998-23520
                                19980213 (9)
AΙ
DT
       Utility
FS
       Granted
LN.CNT 441
INCL
       INCLM: 435/029.000
       INCLS: 435/289.100; 435/970.000
              435/029.000
NCL
       NCLM:
       NCLS:
              435/289.100; 435/970.000
IC
       [6]
       ICM
              C12Q001-02
       ICS
              G01N033-53
       IPCI
              C12Q0001-02 [ICM,6]; G01N0033-53 [ICS,6]
       IPCR
              C12M0001-14 [I,C*]; C12M0001-14 [I,A]
EXF
       435/29; 435/289.1; 435/970
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 15 OF 32 USPATFULL on STN
Full Text
       1999:65049 USPATFULL
ΑN
       Surgery plume filter device and method of filtering
ΤI
TN
       Skalla, Randy Marc, Leesburg, GA, United States
       Ahrens, Carl Austin, Cincinnati, OH, United States
Garner, Jr., Robert Keith, Miamisburg, OH, United States
       Wilkinson, Bradley Carl, Cincinnati, OH, United States
       EnviroSurgical, Inc., Springfield, OH, United States (U.S. corporation)
PA
PΙ
       US 5910291
                                19990608
                                19960603 (8)
       US 1996-657156
ΑТ
       Continuation-in-part of Ser. No. US 1994-198480, filed on 18 Feb 1994,
RLI
       now patented, Pat. No. US 5522808 which is a division of Ser. No. US
       1992-851862, filed on 16 Mar 1992, now patented, Pat. No. US 5288469
DT
       Utility
FS
       Granted
LN.CNT 1083
INCL
       INCLM: 422/171.000
       INCLS: 422/169.000; 422/170.000; 422/122.000; 055/233.000; 096/134.000;
               096/341.000; 261/DIG.026
NCL
       NCLM:
              422/171.000
              096/134.000; 096/296.000; 096/341.000; 261/DIG.026; 422/122.000;
       NCLS:
              422/169.000; 422/170.000
TC
       [6]
       ICM
              B01D050-00
       ICS
              B01D053-00; A61L009-00
       IPCI
              B01D0050-00 [ICM,6]; B01D0053-00 [ICS,6]; A61L0009-00 [ICS,6]
       IPCR
              B01D0046-24 [I,C*]; B01D0046-24 [I,A]; B01D0053-04 [I,C*];
              B01D0053-04 [I,A]; B01D0053-46 [I,C*]; B01D0053-54 [I,C*];
              B01D0053-58 [I,A]; B01D0053-72 [I,A]
EXF
       422/168; 422/169; 422/171; 422/4; 422/5; 422/122; 422/170; 096/134;
       096/150; 096/341; 055/233; 055/316; 055/255; 055/357; 055/247;
       261/DIG.26; 604/317; 604/319
L10 ANSWER 16 OF 32 USPATFULL on STN
Full
     Text
       1999:50845 USPATFULL
ΑN
       Formulations of magnesium compounds for local application and methods of
TT
       treatment using the same
IN
       Marx, Alvin J., 511 Mirepoix, San Antonio, TX, United States 78232-1951
                                19990427
PΙ
       US 5898037
```

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AΙ
       US 1996-678151
                                 19960711 (8)
       Continuation of Ser. No. US 1994-311599, filed on 23 Sep 1994, now
RLT
       abandoned which is a continuation-in-part of Ser. No. US 1992-975786,
       filed on 13 Nov 1992, now abandoned
       Utility
DT
       Granted
FS
LN.CNT 881
       INCLM: 424/049.000
INCL
       INCLS: 424/054.000; 424/709.000
NCL
       NCLM:
              424/049.000
       NCLS:
              424/054.000; 424/709.000
IC
       [6]
              A61K007-16
       ICM
              A61K007-22; A61K033-04
       ICS
              A61K0007-16 [ICM,6]; A61K0007-22 [ICS,6]; A61K0033-04 [ICS,6]
       IPCI
              A61K0008-19 [I,C*]; A61K0008-19 [I,A]; A61K0033-06 [I,C*];
       IPCR
              A61K0033-06 [I,A]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,A];
              A61Q0019-00 [I,C*]; A61Q0019-00 [I,A]
       424/49; 424/54; 424/709
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 17 OF 32 USPATFULL on STN
Full Text
ΑN
       97:68148 USPATFULL
       Personal product compositions comprising heteroatom containing alkyl
ΤI
       aldonamide compounds
       Vermeer, Robert, Nutley, NJ, United States
TN
PΑ
       Lever Brothers Company, Division of Conopco, Inc., New York, NY, United
       States (U.S. corporation)
       US 5653970
                                 19970805
PΤ
       US 1994-352008
                                 19941208 (8)
AΙ
DT
       Utility
FS
       Granted
LN.CNT 6060
       INCLM: 424/070.240
TNCL
       INCLS: 424/070.100; 514/847.000; 510/126.000; 510/135.000
NCL
       NCLM:
              424/070.240
              424/070.100; 510/126.000; 510/135.000; 514/847.000
       NCLS:
IC
       [6]
       ICM
              A61K007-07
       ICS
              A61K007-075
              A61K0007-07 [ICM,6]; A61K0007-075 [ICS,6]
       IPCI
               A61K0008-30 [I,C*]; A61K0008-60 [I,A]; A61Q0005-02 [I,C*];
       IPCR
              A61Q0005-02 [I,A]; A61Q0009-02 [I,C*]; A61Q0009-02 [I,A]; A61Q0009-04 [I,C*]; A61Q0009-04 [I,C*]; A61Q0015-00 [I,C*]; A61Q0015-00 [I,A]; A61Q0017-04 [I,C*]; A61Q0017-04 [I,A];
               A61Q0019-00 [I,C*]; A61Q0019-00 [I,A]; A61Q0019-10 [I,C*];
               A61Q0019-10 [I,A]
       424/401; 424/70.31; 424/70.19; 424/70.24
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 18 OF 32 USPATFULL on STN
Full Text
       84:58202 USPATFULL
AN
ΤI
       Preparations containing methylsulfonylmethane and methods of use and
       purification
       Herschler, Robert J., 3080 NW. 8th St., Camas, WA, United States 98607
TN
PΙ
       US 4477469
                                 19841016
       US 1981-277592
                                 19810626 (6)
ΑI
       Division of Ser. No. US 1979-71068, filed on 30 Aug 1979, now patented,
RLI
       Pat. No. US 4296104
DТ
       Utility
       Granted
LN.CNT 822
       INCLM: 424/322.000
INCL
              514/588.000
NCL
       NCLM:
IC
       [3]
       ICM
              A61K031-17
              A61K0031-17 [ICM,3]
       IPCI
              A61K0031-095 [I,C*]; A61K0031-10 [I,A]; A61K0031-17 [I,C*];
       IPCR
              A61K0031-17 [I,A]; A61K0031-18 [I,C*]; A61K0031-18 [I,A];
              A61K0033-14 [I,C*]; A61K0033-14 [I,A]; A61K0008-30 [I,C*];
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A61K0008-46 [I,A]; A61Q0003-00 [I,C*]; A61Q0003-00 [I,A];
              A61Q0019-00 [I,C*]; A61Q0019-00 [I,A]
       424/322
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 19 OF 32 USPATFULL on STN
Full Text
       82:62978 USPATFULL
ΑN
TΙ
       Use of calcium metasilicate (wollastonite) as a formaldehyde suppressant
       for urea formaldehyde resins
IN
       Wawzonek, Stanley, 2014 Ridgeway Dr., Iowa City, IA, United States
       52240
       US 4366264
                                19821228
PΙ
       US 1982-369148
AΙ
                                19820416 (6)
DT
       Utility
FS
       Granted
LN.CNT 464
INCL
       INCLM: 521/122.000
       INCLS: 521/187.000; 521/188.000; 524/456.000; 524/597.000
NCL
       NCLM:
              521/122.000
              521/187.000; 521/188.000; 524/456.000; 524/597.000
       NCLS:
TC
       [3]
       ICM
              C08J009-30
       IPCI
              C08J0009-30 [ICM, 3]; C08J0009-00 [ICM, 3, C*]
       IPCR
              C08J0009-00 [I,C*]; C08J0009-00 [I,A]; C08K0003-00 [I,C*];
              C08K0003-34 [I,A]
       521/122; 521/187; 521/188; 524/456; 524/597
EXE
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 20 OF 32 USPATFULL on STN
Full Text
       81:57504 USPATFULL
ΑN
ΤI
       Methylsulfonylmethane and methods of use
IN
       Herschler, Robert J., 3080 NW. 8th St., Camas, WA, United States 98607
PΙ
       US 4296130
                                19811020
ΑТ
       US 1979-71068
                                19790830 (6)
DT
       Utility
FS
       Granted
LN.CNT 734
       INCLM: 424/337.000
INCL
NCL
       NCLM:
              514/711.000
IC
       [3]
       ICM
              A61K031-10
       IPCI
              A61K0031-10 [ICM, 3]; A61K0031-095 [ICM, 3, C*]
              A61K0008-00 [I,C*]; A61K0008-00 [I,A]; A61K0008-19 [I,C*];
       IPCR
              A61K0008-20 [I,A]; A61K0008-30 [I,C*]; A61K0008-30 [I,A];
              A61K0008-34 [I,A]; A61K0008-40 [I,A]; A61K0008-46 [I,A];
              A61K0008-60 [I,A]; A61K0008-72 [I,C*]; A61K0008-86 [I,A];
              A61K0009-06 [I,C*]; A61K0009-06 [I,A]; A61K0009-08 [I,C*];
              A61K0009-08 [I,A]; A61K0031-045 [I,C*]; A61K0031-047 [I,A];
              A61K0031-095 [I,C*]; A61K0031-10 [I,A]; A61K0031-17 [I,C*];
              A61K0031-17 [I,A]; A61K0033-14 [I,C*]; A61K0033-14 [I,A]; A61P0007-00 [I,C*]; A61P0007-08 [I,A]; A61Q0003-00 [I,C*];
              A61Q0003-00 [I,A]; A61Q0003-02 [I,C*]; A61Q0003-02 [I,A];
              A61Q0003-04 [I,C*]; A61Q0003-04 [I,A]; A61Q0005-00 [I,C*];
              A61Q0005-00 [I,A]; A61Q0005-02 [I,C*]; A61Q0005-02 [I,A];
              A61Q0019-00 [I,C*]; A61Q0019-00 [I,A]
       424/337
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 21 OF 32 USPATFULL on STN
Full Text
ΑN
       77:43415 USPATFULL
ΤТ
       Thermogenic system
       Frump, John Adams, Terre Haute, IN, United States
TN
       Hunsucker, Jerry Hoyt, Terre Haute, IN, United States
       IMC Chemical Group, Inc., Terre Haute, IN, United States (U.S.
PA
       corporation)
PΙ
       US 4042520
                                19770816
       US 1976-655321
ΑТ
                                19760205 (5)
DT
       Utility
FS
       Granted
```

```
LN.CNT 493
       INCLM: 252/070.000
TNCL
       INCLS: 126/263.000; 252/090.000; 252/188.300R; 260/307.000F;
               260/307.000FA
NCL
       NCLM:
               252/070.000
               126/263.010; 252/183.130; 510/138.000; 510/158.000; 548/215.000
       NCLS:
IC
       [2]
       ICM
               C09K003-00
       ICS
               C09K003-18; C09K005-00
       IPCI
               C09K0003-00 [ICM,2]; C09K0003-18 [ICS,2]; C09K0005-00 [ICS,2]
       IPCR
               A61K0008-02 [I,C*]; A61K0008-02 [I,A]; A61K0008-30 [I,C*];
               A61K0008-49 [I,A]; A61Q0009-02 [I,C*]; A61Q0009-02 [I,A];
               A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]; C09K0003-18 [I,C*];
               C09K0003-18 [I,A]; C09K0003-30 [I,C*]; C09K0003-30 [I,A];
       C09K0005-00 [I,C*]; C09K0005-16 [I,A]
252/90; 252/188.3; 252/70; 252/188.3R; 424/45; 424/47; 424/73; 126/263;
EXF
       260/307F; 260/307FA; 044/3; 044/3R; 149/37; 149/119; 244/134R
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 22 OF 32 USPATFULL on STN
Full Text
       75:38713 USPATFULL
ΑN
       Aerosol package of product containing liquified gas
ΤТ
ΙN
       Laauwe, Robert H., Franklin Lakes, NJ, United States
PΙ
       US 3896970
                                 19750729
       US 1973-409689
ΑI
                                 19731026 (5)
       Division of Ser. No. US 1972-270560, filed on 10 Jul 1972, now patented,
RLT
       Pat. No. US 3788521
       Utility
DT
FS
       Granted
LN.CNT 771
       INCLM: 222/094.000
INCL
NCL
       NCLM: 222/094.000
IC
       [2]
       ICM
               B65D035-24
               B65D0035-24 [ICM, 2]
       TPCT
       IPCR     B65D0083-14 [I,C*]; B65D0083-14 [I,A]
222/94; 222/136; 222/145; 222/402.24; 222/402.18; 222/193; 222/95;
EXF
       222/386.5; 222/1
L10 ANSWER 23 OF 32 USPATFULL on STN
Full Text
ΑN
       75:8529 USPATFULL
ΤI
       NON-PRESSURIZED PACKAGE CONTAINING SELF-HEATING PRODUCTS
       Schmitt, William H., Elmhurst, IL, United States
IN
       Alberto Culver Company, Melrose Park, IL, United States (U.S.
PA
       corporation)
PΙ
       US 3866800
                                 19750218
       US 1969-798628
                                 19690212 (4)
ΑТ
DT
       Utility
FS
       Granted
LN.CNT 734
       INCLM: 222/094.000
INCL
       INCLS: 252/188.300; 424/045.000; 424/047.000
NCL
              222/094.000
              252/183.140; 424/045.000; 424/047.000
       NCLS:
TC
       [1]
       ICM
               B65D035-24
               B65D0035-24 [ICM, 1]
       IPCI
               B65D0035-00 [I,C*]; B65D0035-22 [I,A]
       IPCR
       222/94; 222/136; 222/145; 424/40; 424/44; 424/45; 424/47; 252/305;
EXF
       252/188.3
L10 ANSWER 24 OF 32 USPATFULL on STN
Full Text
ΑN
       74:5585 USPATFULL
TΙ
       AEROSOL PACKAGE
       Laauwe, Robert H., 237 Ridge Rd., Franklin Lakes, NJ, United States
IN
       07417
PΙ
       US 3788521
                                 19740129
ΑI
       US 1972-270560
                                 19720710 (5)
DT
       Utility
```

```
FS
       Granted
LN.CNT 783
       INCLM: 222/094.000
INCL
NCL
       NCLM: 222/094.000
IC
       [1]
       ICM
               B65D035-24
               B65D0035-24 [ICM, 1]
       TPCT
              B65D0083-14 [I,C*]; B65D0083-14 [I,A]
       IPCR
EXF
       222/94; 222/135; 222/386.5; 222/95; 222/389; 424/45; 424/47
L10 ANSWER 25 OF 32 USPATOLD on STN
Full Text
       1974:66209 USPATOLD
ΑN
       THERMOGENIC SYSTEMS
ΤI
ΙN
       MARGOLIS E
       DART INDUSTRIES INC.
PA
PΤ
       US 3804771
                                 19740416
                            Α
ΑI
       US 1972-288861
                                 19720901
       US 1972-288861
                                 19720913
PRAT
       Utility
DT
       GRANTED
FS
LN.CNT 442
       INCLM: 252/070.000
TNCL
       INCLS: 126/263.010; 252/183.130; 424/047.000; 510/131.000; 510/158.000;
               510/365.000; 510/386.000
NCL
       NCLM:
               252/070.000
               126/263.010; 252/183.130; 424/047.000; 510/131.000; 510/158.000;
       NCLS:
               510/365.000; 510/386.000
              A61K0008-02 [I,C*]; A61K0008-02 [I,A]; A61Q0009-02 [I,C*]; A61Q0009-02 [I,A]; A61Q0019-10 [I,C*]; A61Q0019-10 [I,A];
IC
       TPCR
               C09K0005-00 [I,C*]; C09K0005-16 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 26 OF 32 USPATOLD on STN
Full Text
ΑN
       1972:58646 USPATOLD
       SELF HEATING LATHER
ΤI
TN
       BODEN HERBERT
       ANTONELLI JOSEPH A
       E. I. DU PONT DE NEMOURS AND COMPANY
PA
PΙ
       US 3632516
                            Α
                                 19720104
       US 1968-762531
                                 19680901
ΑТ
       US 1968-762531
                                 19680925
PRAI
DT
       Utility
       GRANTED
FS
LN.CNT 570
       INCLM: 510/372.000
INCL
       INCLS: 222/146.300; 252/183.140; 424/073.000; 510/108.000; 510/120.000;
               510/140.000; 510/406.000
NCL
       NCLM:
               510/372.000
               222/146.300; 252/183.140; 424/073.000; 510/108.000; 510/120.000;
       NCLS:
               510/140.000; 510/406.000
               A61K0008-02 [I,C*]; A61K0008-02 [I,A]; A61Q0009-02 [I,C*];
TC
       IPCR
               A61Q0009-02 [I,A]; C11D0009-04 [I,C*]; C11D0009-42 [I,A];
               C11D0017-00 [I,C*]; C11D0017-00 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 27 OF 32 USPATOLD on STN
     Text
Full
       1963:41424 USPATOLD
AN
       Protective coating
ΤT
IN
       SCHUSTER LUDWIG K
       BALDI JR ALFONSO L
       US 3112231
                                 19631126
PТ
                            Α
       US 1957-666852
                                 19570620
ΑТ
       US 1957-666852
                                 19570620
PRAI
DT
       Utility
FS
       GRANTED
LN.CNT 720
       INCLM: 148/267.000
NCL
       NCLM: 148/267.000
IC
       IPCR
              C23C0022-73 [I,C*]; C23C0022-74 [I,A]
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT. L10 ANSWER 28 OF 32 USPATOLD on STN Full Text ΑN 1953:22984 USPATOLD One step photographic transfer process TΙ ΙN LAND EDWIN H US 2647056 19530728 PΤ Α ΑI US 1948-7795 19480212 PRAI US 1948-7795 19480212 DT Utility FS GRANTED LN.CNT 1415 INCL INCLM: 430/141.000 INCLS: 430/149.000; 430/244.000; 430/403.000; 430/404.000 430/141.000 NCL NCLM: 430/149.000; 430/244.000; 430/403.000; 430/404.000 NCLS: IC G03C0008-00 [I,C*]; G03C0008-42 [I,A] CAS INDEXING IS AVAILABLE FOR THIS PATENT. L10 ANSWER 29 OF 32 USPAT2 on STN Full Text 2005:131808 USPAT2 ΝA ΤI Block polymers, compositions and methods of use for foams, laundry detergents, shower rinses and coagulants ΙN Yeung, Dominic Wai-Kwing, Ontario, CANADA Bergeron, Vance, Antony, FRANCE Bodet, Jean-Francois, Mason, OH, UNITED STATES Sivik, Mark R., Ft. Mitchell, KY, UNITED STATES Kluesener, Bernard W., Harrison, OH, UNITED STATES Scheper, William M., Lawrenceburg, IN, UNITED STATES Rhodia Inc., Cranbury, NJ, UNITED STATES (U.S. corporation) PAPΙ US 7335700 B2 20080226 US 2005-25967 AΙ 20050103 (11) RLI Continuation of Ser. No. US 2000-698149, filed on 30 Oct 2000, Pat. No. US 6864314 Continuation-in-part of Ser. No. US 1999-318942, filed on 26 May 1999, ABANDONED Utility DT FS GRANTED LN.CNT 4583 INCLM: 525/091.000 INCL INCLS: 525/089.000; 525/329.200; 525/330.500; 524/762.000; 524/808.000 525/091.000; 510/235.000 524/762.000; 524/808.000; 525/089.000; 525/329.200; 525/330.500 C11D0001-00 [ICM,7] NCL NCLM: NCLS: IPCI IC IPCI-2 C08F0012-28 [I,A]; C08F0012-00 [I,C*]; C08K0005-16 [I,A]; C08K0005-00 [I,C*] C08F0012-00 [I,C]; C08F0012-28 [I,A]; A61K0008-72 [I,C*]; **IPCR** A61K0008-90 [I,A]; A61Q0005-02 [I,C*]; A61Q0005-02 [I,A]; A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]; C08F0220-00 [I,C*]; C08F0220-34 [I,A]; C08F0293-00 [I,C*]; C08F0293-00 [I,A]; C08K0005-00 [I,C]; C08K0005-16 [I,A]; C08L0053-00 [I,C*]; C08L0053-00 [I,A]; C11D0001-00 [I,C*]; C11D0001-00 [I,A]; C11D0003-37 [I,C*]; C11D0003-37 [I,A]; D21H0021-10 [I,C*]; D21H0021-10 [I,A] 525/91; 525/89; 525/329.2; 525/330.5; 524/70; 524/762; 524/808 EXF CAS INDEXING IS AVAILABLE FOR THIS PATENT. L10 ANSWER 30 OF 32 USPAT2 on STN Full Text 2002:294312 USPAT2 ΑN ΤI External compositions for skin comprising sphingoglycolipid Murata, Katsumi, Tokyo, JAPAN Nozawa, Takashi, Tokyo, JAPAN TNHara, Hisako, Tokyo, JAPAN Asai, Michiki, Tokyo, JAPAN Wakayama, Sachio, Tokyo, JAPAN Kibun Food Chemifa Co., Ltd., Tokyo, JAPAN (non-U.S. corporation) US 6514744 B2 20030204 PA

20011212 (10)

Pat. No. US 6348201, issued on 19 Feb 2002

Division of Ser. No. US 1998-84394, filed on 27 May 1998, now patented,

PΙ

ΑI

RLI

US 2001-12510

```
PRAI
       JP 1997-141768
                              19970530
       JP 1997-141769
                              19970530
       JP 1997-141770
                              19970530
                              19970530
       JP 1997-141771
       JP 1998-9963
                              19980121
        JP 1998-61749
                              19980312
DT
       Utility
FS
       GRANTED
LN.CNT 1111
INCL
        INCLM: 435/252.100
        INCLS: 435/254.100; 435/255.100
               435/252.100; 424/195.150
435/254.100; 435/255.100
NCL
       NCLM:
       NCLS:
IC
        [7]
       ICM
               C12N001-20
       ICS
               C12N001-14
       IPCI
               A61K0035-84 [ICM, 7]; C12N0001-18 [ICS, 7]
        IPCI-2 C12N0001-20 [ICM, 7]; C12N0001-14 [ICS, 7]
       IPCR
               A61K0008-02 [I,C*]; A61K0008-02 [I,A]; A61K0008-30 [I,C*];
               A61K0008-68 [I,A]; A61K0008-96 [I,C*]; A61K0008-97 [I,A]; A61K0008-99 [I,A]; A61K0036-06 [I,C*]; A61K0036-06 [I,A]; A61Q0001-02 [I,C*]; A61Q0001-04 [I,A];
               A61Q0001-06 [I,A]; A61Q0001-08 [I,A]; A61Q0001-10 [I,A];
               A61Q0003-02 [I,C*]; A61Q0003-02 [I,A]; A61Q0005-00 [I,C*];
               A61Q0005-00 [I,A]; A61Q0005-02 [I,C*]; A61Q0005-02 [I,A];
               A61Q0005-10 [I,C*]; A61Q0005-10 [I,A]; A61Q0009-02 [I,C*];
               A61Q0009-02 [I,A]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,A];
               A61Q0019-00 [I,C*]; A61Q0019-00 [I,A]; A61Q0019-02 [I,C*]; A61Q0019-02 [I,A]; A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]; C12N0001-14 [I,C*]; C12N0001-14 [I,C*]; C12N0001-20 [I,C*];
               C12N0001-20 [I,A]
        424/450; 435/254.1; 435/255.1; 435/252.1
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 31 OF 32 USPAT2 on STN
Full Text
        2002:164425 USPAT2
ΑN
       Cosmetic, personal care, cleaning agent, and nutritional supplement
ΤТ
        compositions and methods of making and using same
       Lee, Sean, Karlsruhe, GERMANY, FEDERAL REPUBLIC OF
ΙN
       Kessler, Susanna, Ergolding, GERMANY, FEDERAL REPUBLIC OF
        Forberich, Oliver, Oberursel, GERMANY, FEDERAL REPUBLIC OF
        Buchwar, Claire, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF
        Greenspan, David C., Gainesville, FL, UNITED STATES
        Schott AG, Mainz, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)
PA
       US 7250174
                              B2 20070731
PΤ
       US 2001-818466
ΑI
                                   20010327 (9)
                              20000414 (60)
PRAI
        US 2000-197162P
        US 2000-192216P
                              20000327 (60)
       Utility
DT
FS
        GRANTED
LN.CNT 4395
INCL
        INCLM: 424/401.000
        INCLS: 424/400.000; 424/404.000; 424/064.000; 424/069.000; 424/070.100
NCL
               424/401.000
                424/064.000; 424/069.000; 424/070.100; 424/400.000; 424/404.000;
       NCLS:
                424/063.000
IC
        IPCI
               A61K0007-021 [ICM,7]; A61K0007-025 [ICS,7]; A61K0007-00 [ICS,7]
        IPCI-2 A61K0006-00 [I,A]; A61K0009-00 [I,A]; A61K0025-34 [I,A];
               A61K0008-00 [I,A]; A61K0008-18 [I,A]
               A61K0006-00 [I,C]; A61K0006-00 [I,A]; A61K0008-00 [I,C];
        IPCR
               A61K0008-00 [I,A]; A61K0008-18 [I,C]; A61K0008-18 [I,A];
               A61K0008-19 [I,C*]; A61K0008-22 [I,A]; A61K0008-25 [I,A];
               A61K0009-00 [I,C]; A61K0009-00 [I,A]; A61Q0001-02 [I,C*];
               A61Q0001-02 [I,A]; A61Q0001-06 [I,A]; A61Q0003-00 [I,C*];
               A61Q0003-00 [I,A]; A61Q0005-02 [I,C*]; A61Q0005-02 [I,A];
               A61Q0009-02 [I,C*]; A61Q0009-02 [I,A]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,A]; A61Q0015-00 [I,C*]; A61Q0015-00 [I,A];
               A61Q0017-04 [I,C*]; A61Q0017-04 [I,A]; A61Q0019-00 [I,C*];
               A61Q0019-00 [I,A]; A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]
        424/400; 424/401; 424/63; 424/64; 424/69; 424/59; 424/404
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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L10 ANSWER 32 OF 32 USPAT2 on STN
Full Text
ΑN
       2002:12038 USPAT2
       External composition for skin comprising sphingoglycolipid
ΤI
       Murata, Katsumi, Tokyo, JAPAN
Nozawa, Takashi, Tokyo, JAPAN
IN
       Hara, Hisako, Tokyo, JAPAN
       Asai, Michiki, Tokyo, JAPAN
       Wakayama, Sachio, Tokyo, JAPAN
       Kibun Food Chemifa Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)
PA
                            B2 20020219
PΤ
       US 6348201
ΑI
       US 1998-84394
                                 19980527 (9)
                             19970530
PRAI
       JP 1997-141768
       JP 1997-141769
                             19970530
       JP 1997-141770
                            19970530
       JP 1997-141771
                            19970530
       JP 1998-963
                            19980121
       JP 1998-61749
                            19980312
       Utility
DT
       GRANTED
FS
LN.CNT 1239
       INCLM: 424/401.000
INCL
       INCLS: 536/017.900; 514/025.000; 435/822.000
NCL
              424/401.000; 424/400.000
              435/822.000; 514/025.000; 536/017.900
       NCLS:
TC
       [7]
       ICM
              A61K007-00
       IPCI
              A61K0009-00 [ICM, 7]
       IPCI-2 A61K0007-00 [ICM, 7]
              A61K0008-02 [I,C*]; A61K0008-02 [I,A]; A61K0008-30 [I,C*];
       IPCR
              A61K0008-68 [I,A]; A61K0008-96 [I,C*]; A61K0008-97 [I,A];
              A61K0008-99 [I,A]; A61Q0001-02 [I,C*]; A61Q0001-02 [I,A];
              A61Q0001-04 [I,A]; A61Q0001-06 [I,A]; A61Q0001-08 [I,A];
              A61Q0001-10 [I,A]; A61Q0005-00 [I,C*]; A61Q0005-00 [I,A];
              A61Q0005-02 [I,C*]; A61Q0005-02 [I,A]; A61Q0005-10 [I,C*]; A61Q0005-10 [I,A]; A61Q0009-02 [I,C*]; A61Q0009-02 [I,A]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,C*];
              A61Q0019-00 [I,A]; A61Q0019-02 [I,C*]; A61Q0019-02 [I,A];
              A61Q0019-10 [I,C*]; A61Q0019-10 [I,A]; C12N0001-14 [I,C*];
              C12N0001-14 [I,A]
       424/401; 536/17.9; 514/25; 435/822
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d 110 1-32 an ti in pa pi kwic 23 25 26
L10 ANSWER 1 OF 32 USPATFULL on STN
Full Text
ΑN
       2008:151098 USPATFULL
ΤI
       BLOCK POLYMERS, COMPOSITIONS AND METHODS OF USE FOR FOAMS, LAUNDRY
       DETERGENTS, SHOWER RINSES AND COAGULANTS
ΙN
       YEUNG, Dominic Wai-Kwing, Ontario, CANADA
       Bergeron, Vance, Antony, FRANCE
       Bodet, Jean-Francois, Mason, OH, UNITED STATES
       Sivik, Mark Robert, Ft. Mitchell, KY, UNITED STATES
       Kluesener, Bernard William, Harrison, OH, UNITED STATES
       Scheper, William Michael, Lawrenceburg, IN, UNITED STATES
       Rhodia Inc., Cranbury, NJ, UNITED STATES (U.S. corporation)
PA
                            A1 20080605
PΙ
       US 20080131393
                fabric cleaning compositions. The polymeric material is also
AB
       effective in oil well treating foam, fire-fighting foam, hard surface
       cleaning foam, shaving cream, post-foaming shaving gel,
       dephiliatories and as a coagulant/retention aid for titanium dioxide in
       paper making.
SUMM
          . . aspect, the present invention provides methods and compositions
       for personal care, such as shampoos, soaps (hand washes and body
       washes), shaving cream, post foaming shaving gel, and
       dephiliatories, oil field foam, fire fighting foam, agrochemical foam,
       hard surface (e.g., bathroom tile) foam cleaner, shower rinse, fabric.
DETD
       For the other uses of these block polymers, such as personal care (e.g.,
```

- hand wash, body wash, shampoo, shaving cream, post-foaming shaving gel, dephiliatories), oil field foam, fire fighting foam, agrochemical foam, hard surface (e.g., bathroom tile) cleaner foam, shower rinse, and coagulants.
- DETD . . or an alkoxylated derivative (preferably ethoxylated or propoxylated) thereof. Z preferably will be derived from a reducing sugar in a reductive amination reaction; more preferably Z will be a glycityl. Suitable reducing sugars include glucose, fructose, maltose, lactose, galactose, mannose, and.
- in the art. In general, they can be made by reacting an alkyl DETD amine with a reducing sugar in a reductive amination reaction to form a corresponding N-alkyl polyhydroxyamine, and then reacting the N-alkyl polyhydroxyamine with a fatty aliphatic ester or.
- . . . provide cleaning performance benefits. Said enzymes include DETD enzymes selected from cellulases, hemicellulases, peroxidases, proteases, gluco-amylases, amylases, lipases, cutinases, pectinases, xylanases, reductases, oxidases, phenoloxidases, lipoxygenases, ligninases, pullulanases, tannases, pentosanases, malanases, eta-glucanases, arabinosidases or mixtures thereof. A preferred combination is a detergent composition. .
- of the present invention. They can be any conventional DETD antioxidant used in detergent compositions, such as 2,6-di-tert-butyl-4methylphenol (BHT), carbamate, ascorbate, thiosulfate, monoethanolamine (MEA), diethanolamine, triethanolamine, etc. It is preferred that the antioxidant, when present, be present in the composition from about 0.001%.
- . (e.g., sodium and potassium dichloroisocyanurates), peroxyacid DETD bleaches (e.g., diperoxydodecane-1,12-dioic acid), inorganic percompound bleaches (e.g., sodium perborate), antioxidants as optional stabilizers, reductive agents, activators for percompound bleaches (e.g., tetraacetylethylenediamine and sodium nonanoyloxybenzene sulfonate), soil suspending agents (e.g., sodium carboxymethyl cellulose), soil anti-redisposition.
- . . . the reactor to form the polymerization mixture. The initiator DETD can be a single organic or inorganic compound or a redox (reduction/oxidation) system of two or more compounds. For example, U.S. Pat. No. 5,863,526, incorporated herein by reference in its entirety, discloses. What is claimed is:
- CLM 43. A method comprising shaving hair from skin comprising applying foam shaving cream to the skin, said shaving cream comprising a foaming agent and a polymer of claim 1.
- CLMWhat is claimed is: 44. A method comprising shaving hair from skin comprising applying a shaving gel to the skin, said gel comprising a foaming agent and a polymer of claim 1.
- L10 ANSWER 2 OF 32 USPATFULL on STN

Full Text

- ΑN
- 2007:314822 USPATFULL
 NEW COSMETIC, PERSONAL CARE, CLEANING AGENT, AND NUTRITIONAL SUPPLEMENT ΤI COMPOSITIONS AND METHODS OF MAKING AND USING SAME
- INLee, Sean, Karlsruhe, GERMANY, FEDERAL REPUBLIC OF Kessler, Susanna, Ergolding, GERMANY, FEDERAL REPUBLIC OF Forberich, Oliver, Oberursel, GERMANY, FEDERAL REPUBLIC OF Buchwar, Claire, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF
- Greenspan, David C., Gainesville, FL, UNITED STATES SCHOTT AG, MAINZ, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation) PA
- US 20070275021 A1 20071129 PΙ
- DETD . also be evaporated to provide a solid material with anti-microbial properties. These compositions can be used in situations where elimination, reduction, or prevention of microbes, including but not limited to bacteria, viruses, and fungi would be advantageous, for example, in cosmetic.
- DETD . effect of bioactive glass. The anti-inflammatory effects of bioactive glass make it particularly useful in skin care formulations by promoting reductions in irritation, itching, redness and rashes.
- DETD The present invention provides for novel formulations of shaving cream and gel products by incorporating bioactive glass into a combination of any of the above-listed ingredients.

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. fit inside dentin tubules that are approximately 1-2 microns
DETD
       in diameter. The occlusion of these tubules leads to a significant
       reduction in the amount of sensitivity after, for example, periodontal
       surgery. A particularly effective combination includes a mixture of
       particles, wherein.
```

DETD . . . bicarbonate, sodium chloride, sodium citrate, sodium phosphate, oxymetazoline HCl, hydroxpropyl methyl cellulose, pheniramine maleate, liquifilm, phenylephrine HCl, sodium acetate, sodium thiosulfate and hydrochloric acid.

. . . comprised a sol-gel-derived bioactive glass powder mixed with DETD a commercially available facial cream. This product gave the appearance of wrinkle reduction and skin-tightening when applied to the face.

The reduction in microbial growth correlates with a pH increase in DETD the medium.

. . solution would significantly increase the hardness of the DETD solution. It was therefore expected that calcification would increase resulting in a reduction of cleaning action, so that these glasses would not be suitable for use as washing and cleaning agents. Moreover, it. .

L10 ANSWER 3 OF 32 USPATFULL on STN $\underline{\text{Full Text}}$

ΑN 2006:130742 USPATFULL

Linkage of agents using microparticles ΤI

ΙN Green, Howard, Brookline, MA, UNITED STATES Compton, Bruce J., Lexington, MA, UNITED STATES Corey, George D., Newton, MA, UNITED STATES

Djian, Philippe, Paris, FRANCE
Pericor Science, Inc., Boston, MA, UNITED STATES (U.S. corporation)
US 20060110379 A1 20060525 PAPΙ

. al., 1993, Pharmacol. Res. 10:945-953), the carbobenzoxy DETD (i.e., CBZ) protective groups are removed using either acid hydrolysis or lithium/liquid ammonia reduction, thereby exposing reactive amine groups. Lithium/liquid ammonia reduction is recommended if microsphere are desired, given its less harsh effect of the external surface of the microparticle. In addition,.

nicroparticle. In addition,. . .
. . as shaving. In these latter embodiments, the composition of DETD the invention comprising a moisturizing agent can be supplied in a shaving gel or creme. Examples of moisturizing agents include: proteoglycans and glycosaminoglycans including hyaluronic acid, crosslinked hyaluronic acid, derivatized hyaluronic acid, chondroitin.

. . . silk amino acids; sodium carboxymethyl chitin; sodium lactate; DETD sodium mannuronate methylsilanol; sodium PCA; sodium PCA; sodium PCA methylsilanol; sodium PG-propyl thiosulfate dimethicone; sodium polyglutamate; soluble collagen; sorbitol; soy sterol; sucrose; sulfated castor oil; TEA-lactate; TEA-PCA; trehalose; tricontanyl PVP; trifluoromethyl C1-4 alkyl.

DETD . . . Butterate; Dimethicone Copolyol Shea Butterate; Dimethicone Copolyol Undecylenate; Dimethicone Hydroxyptropyl Trimonioum Chloride; Dimethicone/Mercaptopropyl Methicone Copolymer; Dimethicone Propyl PG-Betaine; Dimethicone/Sodium PG-Propyidimethicone Thiosulfate Copolymer; Dimethiconol Arginine; Dimethiconol Cysteine; Dimethiconol Lactate; Dimethiconol Panthenol; Dimethiconol/Silsesquioxane Copolymer; Dimethaxysilyl Ethylenediaminopropyl Dimethicone;

Dimethylaminopropylamido PCA Dimethicone; Dimethyl Aspartic Acid;. DETD . . Isethionate; Sodium Palmitoyl Chondroitin Sulfate; Sodium Palmitoyl Hydrolyzed Collagen; Sodium Palmitoyl Hydrolyzed Wheat Protein; Sodium Pantothenate; Sodium PCA; Sodium PG-Propyl Thiosulfate Dimethicone; Sodium Polyaspartate; Sodium Polyglutamate; Sodium Ricinoleoamphoacetate; Sodium Soy Hydrolyzed Collagen; Sodium Stearoamphoacetate; Sodium Stearoamphohydroxypropyl-sulfonate; Sodium Stearoamphopropionate; Sodium Stearoyl Casein;.

DETD . . . sebacate; dicapryl adipate; dicetyl adipate; diethyl phthalate; diethylene glycolamine/epichlorohydrin/piperazine copolymer; diglycol/chdm/isophthalates/sip copolymer; dilinoleic acid/ethylenediamine copolymer; dimethicone/mercaptopropyl methicone copolymer; dimethicone thiosulfate copolymer; dimethyl phthalate; dioctyl adipate; dioctyl phthalate; dioctyl sebacate; dioctyl succinate; dmapa acrylates/acrylic acid/acrylonitrogens copolymer; dmhf; dodecanedioic acid/cetearyl alcohol/glycol copolymer;. . .

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L10 ANSWER 4 OF 32 USPATFULL on STN
Full Text
ΑN
       2006:64424 USPATFULL
       Packaging container for discharge of plurality of contents, packaging
ΤI
       product including the packaging container and process for producing the
       packaging product
       Mekata, Šatoshi, Osaka, JAPAN
IN
PΙ
       US 20060054634
                           A1 20060316
AΒ
             . dye, a hair setting agent, an antiphlogistic analgesic, a glow
       inhibitor, a coolant, a pack agent, a cleansing agent, a shaving
       foam, a humectant, an antiperspirant, a vitamin or a skin softener.
             . used. This demonstrates the effects well. As reactions
DETD
       generated by contacting or mixing of the contents, neutralization
       reactions, hydration reactions, oxidation/reduction reactions, ion
       exchange reactions, dissolution, acidolysis, etc. may be mentioned. As
       effects obtained by the reactions, generation of heat, cooling,. .
DETD
             . numbers 10-20) copolymers, and acid components. These reagents
       may be used for application of setting agents for hairs, hair dyes,
       reduction of inflammation painkiller, ant-heat flushes, coolants,
       etc., and they display effects to thicken discharged contents (ejected
       matter) to improve adhesion,.
        As combinations of reaction components participating in
DETD
       oxidation/reduction reaction, for example, dyestuffs, such as
       paraphenylene diamine, and oxidising agents, such as hydrogen peroxide
       and oxidizing enzymes; sodium sulfite and hydrogen peroxide; sodium
       thiosulfate and hydrogen peroxide, etc. may be mentioned. These are
       used for applications, such as hair dyes, moisturing creams, cleansing
              . discharge hair dye, enzyme hair dye, hair dress agent or
DETD
       setting agent for hair, hair growth agent or hair restorers, reduction
       of inflammation pain killer, anti-heat flushes, coolants, pack agents,
       cleansing agents, shaving foams, moisturizers, antipersipirants, vitamin
       preparations, emollients and etc.
L10 ANSWER 5 OF 32 USPATFULL on STN
Full Text
       2005:270526 USPATFULL
ΑN
ΤI
       Linkage of agents to body tissue using microparticles and
       transglutaminase
       Green, Howard, Brookline, MA, UNITED STATES
ΙN
       Compton, Bruce J., Lexington, MA, UNITED STATES
       Corey, George D., Newton, MA, UNITED STATES
Djian, Philippe, Paris, FRANCE
Pericor Science, Inc., Boston, MA, UNITED STATES (U.S. corporation)
US 6958148

B1 20051025
PA
PΙ
DETD
            . al., 1993, Pharmacol. Res. 10:945-953), the carbobenzoxy (i.e.,
       CBZ) protective groups are removed using either acid hydrolysis or
       lithium/liquid ammonia reduction, thereby exposing reactive amine
       groups. Lithium/liquid ammonia reduction is recommended if
       microspheres are desired, given its less harsh effect of the external
       surface of the microparticle. In addition,. . . . . . . as shaving. In these latter embodiments, the composition of the
DETD
       invention comprising a moisturizing agent can be supplied in a shaving
       gel or creme. Examples of moisturizing agents include: proteoglycans
       and glycosaminoglycans including hyaluronic acid, crosslinked hyaluronic
       acid, derivatized hyaluronic acid, chondroitin.
          . . silk amino acids; sodium carboxymethyl chitin; sodium lactate;
DETD
       sodium mannuronate methylsilanol; sodium PCA; sodium PCA; sodium PCA
       methylsilanol; sodium PG-propyl thiosulfate dimethicone; sodium
       polyglutamate; soluble collagen; sorbitol; soy sterol; sucrose; sulfated
       castor oil; TEA-lactate; TEA-PCA; trehalose; tricontanyl PVP;
       trifluoromethyl C1-4 alkyl.
DETD
            . Butterate; Dimethicone Copolyol Shea Butterate; Dimethicone
```

Copolyol Undecylenate; Dimethicone Hydroxyptropyl Trimonioum Chloride; Dimethicone/Mercaptopropyl Methicone Copolymer; Dimethicone Propyl PG-Betaine; Dimethicone/Sodium PG-Propyldimethicone Thiosulfate

Copolymer; Dimethiconol Arginine; Dimethiconol Cysteine; Dimethiconol Lactate; Dimethiconol Panthenol; Dimethiconol/Silsesquioxane Copolymer;

Dimethylaminopropylamido PCA Dimethicone; Dimethyl Aspartic Acid;.

. . . Isethionate; Sodium Palmitoyl Chondroitin Sulfate; Sodium

Dimethaxysilyl Ethylenediaminopropyl Dimethicone;

DETD

33

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Palmitoyl Hydrolyzed Collagen; Sodium Palmitoyl Hydrolyzed Wheat Protein; Sodium Pantothenate; Sodium PCA; Sodium PG-Propyl Thiosulfate Dimethicone; Sodium Polyaspartate; Sodium Polyglutamate; Sodium Ricinoleoamphoacetate; Sodium Soy Hydrolyzed Collagen; Sodium Stearoamphoacetate; Sodium Stearoamphohydroxypropyl-sulfonate; Sodium Stearoamphopropionate; Sodium Stearoyl Casein; . . . . . . . sebacate; dicapryl adipate; dicetyl adipate; diethyl phthalate
```

DETD . . . sebacate; dicapryl adipate; dicetyl adipate; diethyl phthalate; diethylene glycolamine/epichlorohydrin/piperazine copolymer; diglycol/chdm/isophthalates/sip copolymer; dilinoleic acid/ethylenediamine copolymer; dimethicone/mercaptopropyl methicone copolymer; dimethicone/sodium PG-propyldimethicone thiosulfate copolymer; dimethyl phthalate; dioctyl adipate; dioctyl phthalate; dioctyl sebacate; dioctyl succinate; dmapa acrylates/acrylic acid/acrylonitrogens copolymer; dmhf; dodecanedioic acid/cetearyl alcohol/glycol copolymer; . .

L10 ANSWER 6 OF 32 USPATFULL on STN

Full Text

- AN 2005:131808 USPATFULL
- TI Block polymers, compositions and methods of use for foams, laundry detergents, shower rinses and coagulants
- IN Yeung, Dominic Wai-Kwing, Mississauga, CANADA
 Bergeron, Vance, Antony, FRANCE
 Bodet, Jean-Francois, Mason, OH, UNITED STATES
 Sivik, Mark Robert, Ft. Mitchell, KY, UNITED STATES
 Kluesener, Bernard William, Harrison, OH, UNITED STATES
 Scheper, William Michael, Lawrenceburg, IN, UNITED STATES
- PA RHODIA, INC., Cranbury, NJ, UNITED STATES, 08512 (non-U.S. corporation)
 PI US 20050113272 A1 20050526
 US 7335700 B2 20080226
- AB . . . fabric cleaning compositions. The polymeric material is also effective in oil well treating foam, fire-fighting foam, hard surface cleaning foam, **shaving cream**, post-foaming **shaving gel**, dephiliatories and as a coagulant/retention aid for titanium dioxide in paper making.
- SUMM . . . aspect, the present invention provides methods and compositions for personal care, such as shampoos, soaps (hand washes and body washes), **shaving cream**, post foaming **shaving gel**, and dephiliatories, oil field foam, fire fighting foam, agrochemical foam, hard surface (e.g., bathroom tile) foam cleaner, shower rinse, fabric.
- DETD For the other uses of these block polymers, such as personal care (e.g., hand wash, body wash, shampoo, **shaving cream**, post-foaming **shaving gel**, diphiliatories), oil field foam, fire fighting foam, agrochemical foam, hard surface (e.g., bathroom tile) cleaner foam, shower rinse, and coagulants. . .
- DETD . . . or an alkoxylated derivative (preferably ethoxylated or propoxylated) thereof. Z preferably will be derived from a reducing sugar in a **reductive** amination reaction; more preferably Z will be a glycityl. Suitable reducing sugars include glucose, fructose, maltose, lactose, galactose, mannose, and. . .
- lactose, galactose, mannose, and. . .

 DETD . . . in the art. In general, they can be made by reacting an alkyl amine with a reducing sugar in a **reductive** amination reaction to form a corresponding N-alkyl polyhydroxyamine, and then reacting the N-alkyl polyhydroxyamine with a fatty aliphatic ester or. . .
- DETD . . . provide cleaning performance benefits. Said enzymes include enzymes selected from cellulases, hemicellulases, peroxidases, proteases, gluco-amylases, amylases, lipases, cutinases, pectinases, xylanases, reductases, oxidases, phenoloxidases, lipoxygenases, ligninases, pullulanases, tannases, pentosanases, malanases, β -glucanases, arabinosidases or mixtures thereof. A preferred combination is a detergent composition. . .
- DETD . . . of the present invention. They can be any conventional antioxidant used in detergent compositions, such as 2,6-di-tert-butyl-4-methylphenol (BHT), carbamate, ascorbate, **thiosulfate**, monoethanolamine (MEA), diethanolamine, triethanolamine, etc. It is preferred that the antioxidant, when present, be present in the composition from about. . .
- DETD . . . (e.g., sodium and potassium dichloroisocyanurates), peroxyacid bleaches (e.g., diperoxydodecane-1,12-dioic acid), inorganic percompound bleaches (e.g., sodium perborate), antioxidants as optional stabilizers, reductive agents, activators for percompound bleaches (e.g.,

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tetraacetylethylenediamine and sodium nonanoyloxybenzene sulfonate), soil suspending agents (e.g., sodium carboxymethyl cellulose), soil anti-redisposition. . .
```

DETD . . . the reactor to form the polymerization mixture. The initiator can be a single organic or inorganic compound or a redox (reduction/oxidation) system of two or more compounds. For example, U.S. Pat. No. 5,863,526, incorporated herein by reference in its entirety, discloses. . .

L10 ANSWER 7 OF 32 USPATFULL on STN

AN 2005:59196 USPATFULL

- TI Block polymers, compositions and methods of use for foams, laundry detergents, shower rinses and coagulants
- Yeung, Dominic Wai-Kwing, 3661 Golden Orchard Drive, Mississauga, Ontario, CANADA L4Y 3J2
 Bergeron, Vance, 118 rue Saint Exupery, Antony, FRANCE 92160
 Bodet, Jean-Francois, 5067 Plantation Ct., Mason, OH, United States 45040
 Sivik, Mark Robert, 2434 Sheffield Ct., Ft. Mitchell, KY, United States 41014
 Kluesener, Bernard William, 11619 New Biddinger Rd., Harrison, OH, United States 45030
 Scheper, William Michael, 2393 Picnic Woods Dr., Lawrenceburg, IN,
- PI US 6864314 B1 20050308

United States 47025

- AB . . . fabric cleaning compositions. The polymeric material is also effective in oil well treating foam, fire-fighting foam, hard surface cleaning foam, **shaving cream**, post-foaming **shaving gel**, dephiliatories and as a coagulant/retention aid for titanium dioxide in paper making.
- SUMM . . . aspect, the present invention provides methods and compositions for personal care, such as shampoos, soaps (hand washes and body washes), **shaving cream**, post foaming **shaving gel**, and dephiliatories, oil field foam, fire fighting foam, agrochemical foam, hard surface (e.g., bathroom tile) foam cleaner, shower rinse, fabric.
- DETD For the other uses of these block polymers, such as personal care (e.g., hand wash, body wash, shampoo, **shaving cream**, post-foaming **shaving gel**, diphiliatories), oil field foam, fire fighting foam, agrochemical foam, hard surface (e.g., bathroom tile) cleaner foam, shower rinse, and coagulants. . .
- DETD . . . or an alkoxylated derivative (preferably ethoxylated or propoxylated) thereof. Z preferably will be derived from a reducing sugar in a **reductive** amination reaction; more preferably Z will be a glycityl. Suitable reducing sugars include glucose, fructose, maltose, lactose, galactose, mannose, and. . .
- DETD . . . in the art. In general, they can be made by reacting an alkyl amine with a reducing sugar in a **reductive** amination reaction to form a corresponding N-alkyl polyhydroxyamine, and then reacting the N-alkyl polyhydroxyamine with a fatty aliphatic ester or. . .
- DETD . . . provide cleaning performance benefits. Said enzymes include enzymes selected from cellulases, hemicellulases, peroxidases, proteases, gluco-amylases, amylases, lipases, cutinases, pectinases, xylanases, reductases, oxidases, phenoloxidases, lipoxygenases, ligninases, pullulanases, tannases, pentosanases, malanases, β -glucanases, arabinosidases or mixtures thereof. A preferred combination is a detergent composition. . .
- DETD . . . of the present invention. They can be any conventional antioxidant used in detergent compositions, such as 2,6-di-tert-butyl-4-methylphenol (BHT), carbamate, ascorbate, **thiosulfate**, monoethanolamine(MEA), diethanolamine, triethanolamine, etc. It is preferred that the antioxidant, when present, be present in the composition from about 0.001%. . .
- DETD . . . (e.g., sodium and potassium dichloroisocyanurates), peroxyacid bleaches (e.g., diperoxydodecane-1,12-dioic acid), inorganic percompound bleaches (e.g., sodium perborate), antioxidants as optional stabilizers, reductive agents, activators for percompound bleaches (e.g., tetraacetylethylenediamine and sodium nonanoyloxybenzene sulfonate), soil suspending agents (e.g., sodium carboxymethyl cellulose), soil anti-redisposition. . .
- $\ensuremath{\text{DETD}}$. . . the reactor to form the polymerization mixture. The initiator

can be a single organic or inorganic compound or a redox (reduction/oxidation) system of two or more compounds. For example, U.S. Pat. No. 5,863,526, incorporated herein by reference in its entirety, discloses. . .

- CLM What is claimed is:
 - 41. A method comprising staving hair from skin comprising applying foam **shaving cream** to the skin, said **shaving cream** comprising a foaming agent and a polymer of claim 1.
- CLM What is claimed is:
 42. A method comprising shaving hair from skin comprising applying a shaving gel to the skin, said gel comprising a foaming agent and a polymer of claim 1.
- L10 ANSWER 8 OF 32 USPATFULL on STN

Full Text

- AN 2004:214981 USPATFULL
- TI Shave gel products
- IN Manivannan, Gurusamy, Maryland Heights, MO, UNITED STATES
 Novikov, Alexander, Framingham, MA, UNITED STATES
 Thong, Stephen, Needham, MA, UNITED STATES
 Barnet, Alfred, Hingham, MA, UNITED STATES
 Xu, Yun, Andover, MA, UNITED STATES
 McLaughlin, Ronald, Medford, MA, UNITED STATES
- PI US 20040166086 A1 20040826
- SUMM [0008] In one aspect, the invention features a post-foaming shave gel product comprising an oxidant component and a **reductant** component. The oxidant component comprises a first shave gel base and an oxidizing agent and the **reductant** component comprises a second shave gel base and a reducing agent.
- SUMM . . . chamber comprising a first shave gel base and about 2% to about 10% of an oxidizing agent; and (c) a **reductant** component in the second chamber comprising a second shave gel base and about 2% to about 10% of a reducing. . . selected and are present in such proportion to provide an exothermic reaction upon mixing of the oxidant component and the **reductant** component during use of the shaving composition.
- SUMM [0012] The oxidizing agent may include a peroxide. The reducing agent may be selected from the group consisting of **thiosulfate** and sulfite compounds, compounds with a thiourea backbone, and mixtures thereof. One or both of the shave gel bases may. . .
- DETD . . . two separate components, (a) an oxidant component containing a first shave gel base and the oxidizing agent and (b) a reductant component containing a second shave gel base and the reducing agent. Any ingredients that could be easily oxidized by the oxidizing agent during the product shelf life are included in the reductant component. These two components are maintained separate in the packaging of the shaving gel composition, as will be discussed further below, and are mixed during or after dispensing. When the two phases are mixed, . . . gel. If the exothermic reaction generates an acid that might tend to irritate the user's skin, one component, preferably the reductant component generally includes a neutralizing agent to neutralize this acid.
- DETD . . . the same consistency before, during and after heating. The blend of surfactants is generally present in both the oxidant and reductant components, so that both components can be provided as stable emulsions that can be dispensed in gel form.
- DETD . . . cosmetic properties. The oil phase of the emulsion may include any desired emollient that is safe for use in a **shaving gel**, is compatible with the other ingredients of the composition, and provides the desired aesthetics and in-shave lubricity. Suitable emollients include. . .
- DETD . . . safe for use on human skin in the amounts used in the formulation. The reducing agent may include, for example, thiosulfate and sulfite compounds, such as sodium sulfite, sodium thiosulfate, ammonium thiosulfate, potassium thiosulfate, and thiourea. Other suitable reducing agents include compounds with a thiourea backbone, such as 1,5 diethyl-2-thiobarbituric acid or its derivatives, . .
- DETD . . . included in stoichiometric proportions, based on the redox reaction that will occur. The redox reaction of hydrogen peroxide with sodium **thiosulfate** is as follows:
- DETD . . . to 45 seconds after the two components are mixed (this is the temperature the gel reaches when the oxidant and $\bf reductant$ phase of

the gel are mixed in a beaker in stoichiometric amounts that provide a total weight of 10 grams. . . . without deleterious effects on the skin or on the properties of DETD the gel. The catalyst is generally included in the reductant component of the composition. Suitable catalysts for the oxidizing agents and reducing agents described above include sodium molybdate, potassium molybdate, seconds, preferably in about 5 to about 15 seconds. The DETD post-foaming agent is generally included in both the oxidant and reductant components in an amount of about 1% to about 6%, preferably about 2% to about 5%, by weight, and may. [0045] The oxidant component and the **reductant** component are DETD maintained separate from each other until the product is dispensed. This may be accomplished using any desired type. . . [0046] As will be illustrated below, the oxidant and **reductant** DETD components may be formed by adding the oxidizing agent and reducing agent, respectively, to first and second shave gel bases.. . . [0048] To form the reductant phase, actives such as sodium DETD thiosulfate and sodium molybdate are added to the shave gel base formed above, followed by the fragrance and dye, with mixing. . . [0050] At $35-55^{\circ}$ C., each of the oxidant and **reductant** DETD components are blended with a post-foaming agent at the desired weight percentage range of 3%-4.5%. The shave gel is then. . . a bag-in-bag assembly. It is preferable to place the oxidant component in the inner side of the bag and the reductant component in the outer side of the bag. Even if there is a breach in the bag, having the oxidant. manufactured according to the formulations shown in the DETD following tables. The formulations in the tables are for the oxidant and reductant phases without post-foaming agent. As discussed above, these phases would be mixed with a desired amount and type of post-foaming. DETD [0054] **Reductant** Phase: Example R-1 R-2 R-3 Wt. % Wt. % Ingredient
 64.43
 67.00
 67.02

 6.50
 6.50
 6.50

 6.00
 6.00
 6.00

 7.50
 5.00
 5.00

 2.80
 2.80
 2.80

 8.00
 8.00
 8.00
 Water Sodium thiosulfate pentahydrate Myristyl alcohol Mineral oil, 65/75 Steareth-100 Ceteth-20 PEG-150 distearate. . . C Blue 1% dye 0.20 0.20 0.20 Example R-6 R-4 R-5 Wt. % ₩t. % Ingredient Wt. % 66.72 60.42 6.50 6.50 6.00 6.00 59.38 6.50 60.42 Sodium thiosulfate pentahydrate 6.50 Myristyl alcohol 7.00 Mineral oil 5.00 5.00 6.00 2.80 2.80 Steareth-100 2.80 8.00 Ceteth-20 8.00 Steareth-20 --. . . C Blue 1% dye 0.20 0.40 0.20 Example R-7 R-8R-9 Ingredient Wt. % Wt. % Wt. % 61.70 62.70 60.10 6.50 6.50 Water

Sodium thiosulfate pentahydrate

Cetyl Alcohol

Mineral oil

Steareth-21

Steareth-2

Myristyl alcohol

6.50

10.0

0.75

3.90

5.00

0.75

3.90

DETD [0055] Any of the **reductant** phases described above can be used with

1.10. . .

6.50

5.00

any of the oxidant phases.

CLM What is claimed is:

- . . . the first chamber comprising a first shave gel base and about 2% to about 10% of an oxidizing agent; a **reductant** component in the second chamber comprising a second shave gel base and about 2% to about 10% of a reducing. . . selected and being present in such proportion to provide an exothermic reaction upon mixing of the oxidant component and the **reductant** component during use of the shaving composition.
- CLM What is claimed is:
- . . The shave gel product of claim 1 or 6 wherein the reducing agent is selected from the group consisting of **thiosulfate** and sulfite compounds, compounds with a thiourea backbone, and mixtures thereof.
- L10 ANSWER 9 OF 32 USPATFULL on STN

Full Text

AN 2004:214980 USPATFULL

TI Shave gel compositions

IN Manivannan, Gurusamy, North Chelmsford, MA, UNITED STATES Novikov, Alexander, Framingham, MA, UNITED STATES Thong, Stephen, Needham, MA, UNITED STATES Barnet, Alfred, Hingham, MA, UNITED STATES Xu, Yun, Andover, MA, UNITED STATES

PI US 20040166085 A1 20040826

SUMM [0007] In one aspect, the invention features a **shaving gel** including a post-foaming shave gel base, and heating reagents selected to provide an exothermic reaction during use of the **shaving gel**.

SUMM . . . reagents may include an oxidizing agent, e.g., a peroxide, and a reducing agent, e.g., selected from the group consisting of **thiosulfate** and sulfite compounds, compounds with a thiourea backbone, and mixtures thereof. The shave gel may be provided in the form of an oxidant component and a **reductant** component that are maintained separate until the shave gel is dispensed by a user.

SUMM . . . relatively shorter polyethylene oxide chain are provided in a ratio in the range of from about 1:1 to 1:3. The **shaving gel** may also include an emollient. Each emulsifier's hydrophilic (water-loving) part includes polyhydric alcohols and polyoxyethylene chains. Typical lipophilic parts may. . .

SUMM . . . oxidant component comprising a first post-foaming shave gel base including an oxidizing agent, and, disposed in the other chamber, a reductant component comprising a second post-foaming shave gel base including a reducing agent.

DETD [0014] Preferred post-foaming **shaving gel** compositions include water, a system of water-soluble polymers, a non-ionic emulsifier including a blend of relatively more hydrophilic and relatively. .

DETD . . . an oil-in-water emulsion that is divided into two phases, (a) an oxidant phase containing the oxidizing agent and (b) a reductant phase containing the reducing agent. Any ingredients that could be easily oxidized by the oxidizing agent during the product shelf life are included in the reductant phase. These two phases are maintained separate in the packaging of the shaving gel composition, as will be discussed further below, and are mixed during or after dispensing. When the two phases are mixed, . . . that heats the gel. If the exothermic reaction generates an acid that might tend to irritate the user's skin, the reductant composition generally includes a neutralizing agent to neutralize this acid.

DETD . . . the same consistency before, during and after heating. The blend of surfactants is generally present in both the oxidant and **reductant** components, so that both components can be provided as stable emulsions that can be dispensed in gel form.

DETD . . . cosmetic properties. The oil phase of the emulsion may include any desired emollient that is safe for use in a **shaving gel**, is compatible with the other ingredients of the composition, and provides the desired aesthetics and in-shave lubricity. Suitable emollients include. . .

DETD . . . safe for use on human skin in the amounts used in the formulation. The reducing agent may include, for example, thiosulfate and sulfite compounds, such as sodium sulfite, sodium thiosulfate, ammonium thiostilfate, potassium thiosulfate, and thiourea. Other suitable reducing agents include compounds with a thiourea backbone, such as 1,5 diethyl-2-thiobarbituric acid or its derivatives, . . .

- DETD . . . included in stoichiometric proportions, based on the redox reaction that will occur. The redox reaction of hydrogen peroxide with sodium **thiosulfate** is as follows:
- DETD . . . to 45 seconds after the two components are mixed (this is the temperature the gel reaches when the oxidant and $\bf reductant$ phase of the gel are mixed in a beaker in stoichiometric amounts that provide a total weight of 10 grams. . .
- DETD . . . without deleterious effects on the skin or on the properties of the gel. The catalyst is generally included in the **reductant** component of the composition. Suitable catalysts for the oxidizing agents and reducing agents described above include sodium molybdate, potassium molybdate, . . .
- DETD . . . seconds, preferably in about 5 to about 15 seconds. The post-foaming agent is generally included in both the oxidant and reductant components, and may be added to concentrates formed by pre-mixing the other ingredients of each component.
- DETD [0042] The oxidant and **reductant** phases are maintained separate from each other until the product is dispensed. This may be accomplished using any desired type. . .
- DETD [0044] To form the **reductant** phase, actives such as sodium **thiosulfate** and sodium molybdate are added to the concentrate formed above, followed by the fragrance and dye, with mixing at 55°.
- DETD [0046] At 35-45° C., each of the oxidant and **reductant** phases are blended with a post-foaming agent at the desired weight percentage range of 3-4.5%. The shave gel is then. . . a bag-in-bag assembly. It is preferable to place the oxidant phase in the inner side of the bag and the **reductant** phase in the outer side of the bag. Even if there is a breach in the bag, having the oxidant. . .

 DETD [0049] **Reductant** Phase:

SSEC-90-1599	SSEC-85-1599	SSEC-89-1599	SSEC-89-1599	
Ingredient	Wt. %	Wt. %	Wt. %	
Water Sodium thiosulfate pentahydrate Myristyl alcohol Mineral oil, 65/75 Steareth-100 Ceteth-20 PEG-150 distearate & 0 0.20 0.20	6.00 7.50 2.80 8.00 C Blue 1% dye	67.00 6.50 6.00 5.00 2.80 8.00	67.02 6.50 6.00 5.00 2.80 8.00	
SSEC-101-1599 Ingredient	SSEC-91-1599 Wt. %	SSEC-98-1599 Wt. %	Wt. %	
Water Sodium thiosulfate pentahydrat Myristyl alcohol Mineral oil Steareth-100 Ceteth-20 Steareth-20 0.20 0.20	6.00 5.00 2.80 8.00	60.42 6.50 6.00 5.00 2.80 8.00	59.38 6.50 7.00 6.00 2.80 C Blue 1% dye	
SSEC-150-1599	SSEC-103-1599	SSEC-149-1599		
Ingredient	Wt. %	₩t. %	Wt. %	
Water Sodium thiosulfate pentahydrate Myristyl alcohol Mineral oil Steareth-100 Steareth-20 PEG-150 distearate DETD [0050] Any of the reduction of the oxidant phase	7.00 6.00 4.60 5.70 0.30 ctant phases described ses.			
DEED				

DETD . . . comparable to the type of foam that is generally observed when

using soap-based post-foaming shaving gels. When the oxidant and $\bf reductant$ phases were mixed in stoichiometric proportions to provide an amount of gel suitable for use in shaving (approximately 8 grams),.

CLM What is claimed is:

- . . agent and a reducing agent, and the shaving composition is provided in the form of an oxidant component and a **reductant** component that are maintained separate until the shaving composition is dispensed by a user.
- CLM What is claimed is:
 5. The shaving composition of claim 4 wherein the reducing agent is selected from the group consisting of **thiosulfate** and sulfite compounds, compounds with a thiourea backbone, and mixtures thereof.
- CLM What is claimed is:
 . . oxidant component comprising a first post-foaming shave gel base
 including an oxidizing agent, and disposed in the other chamber, a
 reductant component comprising a second post-foaming shave gel base
 including a reducing agent; at least one of the post-foaming shave gel.
- CLM What is claimed is:
 16. The post-foaming **shaving gel** product of claim 15 wherein the non-ionic emulsifier further comprises a fatty alcohol ethoxylate with relatively shorter polyethylene oxide chain.
- CLM What is claimed is:
 17. The post-foaming **shaving gel** product of claim 16 wherein the fatty alcohol ethoxylates with relatively long and relatively shorter polyethylene oxide chains are provided. . .
- CLM What is claimed is:

 18. The post-foaming **shaving gel** product of claim 14 wherein the non-ionic emulsifier comprises a blend of a relatively more hydrophobic surfactant and a relatively. . .
- CLM What is claimed is:
 19. The post-foaming **shaving gel** product of claim 12 wherein the first and second post-foaming shave gel bases are substantially free of soaps and ionic. . .
- L10 ANSWER 10 OF 32 USPATFULL on STN

AN 2002:294312 USPATFULL

- TI External compositions for skin comprising sphingoglycolipid
- IN Murata, Katsumi, Tokyo, JAPAN
 Nozawa, Takashi, Tokyo, JAPAN
 Hara, Hisako, Tokyo, JAPAN
 Asai, Michiki, Tokyo, JAPAN
 Wakayama, Sachio, Tokyo, JAPAN
- Wakayama, Sachio, Tokyo, JAPAN

 PA KIBUN FOOD CHEMIFA CO., LTD., Minato-ku, Tokyo, JAPAN, 105-0004
 (non-U.S. corporation)
- PI US 20020164351 A1 20021107 US 6514744 B2 20030204
- SUMM . . . shadow, cream or milky lotion, toilet lotion, perfume, face powder, facial oil, hair-care cosmetics, hair dye, jelly fragrance, powder, pack, **shaving cream**, shaving lotion, suntan oil, anti-suntan oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening cream, foundation, powdery fragrance, cheek rouge, mascara, . . .
- SUMM . . . shadow, cream or milky lotion, toilet lotion, perfume, face powder, facial oil, hair-care cosmetics, hair dye, jelly fragrance, powder, pack, **shaving cream**, shaving lotion, suntan oil, anti-suntan oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening cream, foundation, powdery fragrance, cheek rouge, mascara, . . .
- SUMM . . . the section for polyol), inorganic salts (e.g. sodium chloride, sodium hydrogen carbonate, sodium carbonate, borax, sodium sulfate, sodium sulfide, sodium thiosulfate, sodium sesquicarbonate, magnesium oxide, calcium carbonate, magnesium carbonate, potassium chloride, potassium sulfide), cultured lactic acid bacteria, sterols (e.g. cholesterol, provitamin. . .

DETD . . . - - - - - - - Oxidation on O-F d - - - - - -

medium

Alkalization on	_	-	_	_	_		
O-F medium Reduction of	_	_	_	-	_		
nitrate to nitrite Simmons' citric	_	-	-	-	-		
acid agar Christensen's DETD	d	+	+	•			
Lysine decarboxylase	_	-	_	_	-		
Ornithine	_	_	_	_	_		
decarboxylase Selenic salt -	_	-	_	-	-		
<pre>reduction Casein hydrolysis</pre>	-	-	-	_	-		
DNase (HCl method)	+	+	+	+	+		
Thomley arginine	_	-	_				
Tyrosine hydrolysis +	+	+	+	+	+		
Brown dye production +	d	+	+	+	+		
on tyrosine agar medium Nitrite reduction	_	_	_	_	_		
- Growth on PHBA	+	+	+	+	+		
+ Endogenous PHBA	+	+	+	+	+		
L10 ANSWER 11 OF 32 USPATFULL on STN Full Text AN 2002:164425 USPATFULL TI New cosmetic, personal care, cleaning agent, and nutritional supplement compositions and methods of making and using same IN Lee, Sean, Karlsruhe, GERMANY, FEDERAL REPUBLIC OF Kessler, Susanna, Ergolding, GERMANY, FEDERAL REPUBLIC OF Forberich, Oliver, Oberursel, GERMANY, FEDERAL REPUBLIC OF Buchwar, Claire, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF Greenspan, David C., Grainsville, FL, UNITED STATES PI US 20020086039 A1 20020704 US 7250174 B2 20070731 SUMM also be evaporated to provide a solid material with anti-microbial properties. These compositions can be used in situations where elimination, reduction, or prevention of microbes, including but not limited to bacteria, viruses, and fungi would be advantageous, for							
example, in cosmetic SUMM effect of bioactive glass. The anti-inflammatory effects of bioactive glass make it particularly useful in skin care formulations by promoting reductions in irritation, itching, redness and rashes. DETD [0293] The present invention provides for novel formulations of shaving cream and gel products by incorporating bioactive glass into							
a combination of any of the above-listed ingredients. DETD fit inside dentin tubules that are approximately 1-2 microns in diameter. The occlusion of these tubules leads to a significant reduction in the amount of sensitivity after, for example, periodontal surgery. A particularly effective combination includes a mixture of							
particles, wherein DETD bicarbonate, sodium chloride, sodium citrate, sodium phosphate, oxymetazoline HCI, hydroxpropyl methyl cellulose, pheniramine maleate, liquifilm, phenylephrine HCI, sodium acetate, sodium thiosulfate and hydrochloric acid.							
DETD comprised a sol-gel-derived bioactive glass powder mixed with a commercially available facial cream. This product gave the appearance of							

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wrinkle reduction and skin-tightening when applied to the face.
DETD
       [0401] The reduction in microbial growth correlates with a pH increase
        in the medium. Examples 18 and 19 below demonstrate the effect of.
        . . . solution would significantly increase the hardness of the
DETD
       solution. It was therefore expected that calcification would increase resulting in a reduction of cleaning action, so that these glasses would not be suitable for use as washing and cleaning agents. Moreover,
        it. . .
L10 ANSWER 12 OF 32 USPATFULL on STN
Full Text
        2002:12038 USPATFULL
ΝA
        EXTERNAL COMPOSITION FOR SKIN COMPRISING SPHINGOGLYCOLIPID
ΤI
       MURATA, KATSUMI, TOKYO, JAPAN
NOZAWA, TAKASHI, TOKYO, JAPAN
ΙN
        HARA, HISAKO, TOKYO, JAPAN
        ASAI, MICHIKI, TOKYO, JAPAN
        WAKAYAMA, SACHIO, TOKYO, JAPAN
       US 20020006414 A1 20020117
US 6348201 B2 20020219
PΙ
       . . . shadow, cream or milky lotion, toilet lotion, perfume, face powder, facial oil, hair-care cosmetics, hair dye, jelly fragrance, powder, pack, shaving cream, shaving lotion, suntan oil, anti-suntan
SUMM
        oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening
        cream, foundation, powdery fragrance, cheek rouge, mascara,. . . .
SUMM
        . . . shadow, cream or milky lotion, toilet lotion, perfume, face
        powder, facial oil, hair-care cosmetics, hair dye, jelly fragrance,
       powder, pack, shaving cream, shaving lotion, suntan oil, anti-suntan
        oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening
        cream, foundation, powdery fragrance, cheek rouge, mascara,. .
SUMM
        . . . the section for polyol), inorganic salt (e.g. sodium chloride,
        sodium hydrogen carbonate, sodium carbonate, borax, sodium sulfate,
        sodium sulfide, sodium thiosulfate, sodium sesquicarbonate, magnesium
        oxide, calcium carbonate, magnesium carbonate, potassium chloride,
        potassium sulfide), cultured lactic acid bacteria, sterol (e.g.
        cholesterol, provitamin. . .
Oxidation on O-F
medium
Alkalization on
O-F medium
Reduction of nitrate
to nitrite
Simmons' citric
acid agar
Christensen's
                        d
DETD . . .
Lysine decarboxylase
Ornithine
decarboxylase
Selenic salt
reduction
Casein hydrolysis
DNase (HCl method)
       +
Thomley arginine
Tyrosine hydrolysis
Brown dye production
on tyrosine agar
medium
Nitrite reduction
```

Growth on PHBA Endogenous PHBA CLM What is claimed is: . shadow, cream or milky lotion, toilet lotion, perfume, face powder, facial oil, hair-care cosmetics, hair dye, jelly fragrance, powder, pack, shaving cream, shaving lotion, suntan oil, anti-suntan oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening cream, foundation, powdery fragrance, cheek rouge, mascara,. . L10 ANSWER 13 OF 32 USPATFULL on STN Full Text 2001:39978 USPATFULL ΑN Surgery plume filter device and method of filtering TΤ INSkalla, Randy Marc, Leesburg, GA, United States Ahrens, Carl Austin, Cincinnati, OH, United States Garner, Jr., Robert Keith, Miamisburg, OH, United States Wilkinson, Bradley Carl, Cincinnati, OH, United States EnviroSurgical, Inc., Cincinnati, OH, United States (U.S. corporation) PAB1 20010320 PΙ US 6203762 DETD . a number of compounds. Representative materials include but are not limited to sodium hypochlorite, sodium perborate, sodium permanganate, and sodium thiosulfate. The oxidizing agent concentration in the solution is typically in the range of about 0.5 to about 30%, by weight. . . . following: 20% potassium permanganate; 50% sodium hydroxide; 20% sodium dichloro-s-triazinetrione dihydrate; 45% potassium hydroxide; DETD 10% sodium perborate; and 20% sodium thiosulfate. The alkaline materials listed above coated onto a porous member retained cyanide, but did not convert the cyanide to any. DETD outer layer 96 of filter cartridge 86. This foam had a much finer bubble structure, with the consistency of a shaving cream. No foam or visible moisture escaped from the filter assembly during the runs. space. The foam provides a maximized surface area exposure of DETD the solution to the airstream for efficient and generally rapid reduction of the undesirable surgery plume agents within the airstream. Furthermore, the amount of solution 142 is maintained so that L10 ANSWER 14 OF 32 USPATFULL on STN Full Text 1999:85240 USPATFULL ΑN Protocol for simulated natural biofilm formation ΤТ Bakich, Shannon L., Racine, WI, United States INGipp, Mark M., Mount Pleasant, WI, United States S.C. Johnson & Son, Inc., Racine, WI, United States (U.S. corporation) PAPΙ US 5928889 19990727 . . . men's shaving residue is added to the reactor about every 24 hours with the nutrient medium. The residue contains ${\tt EDGE \$}$ shaving DETD cream, water, hair, and skin cells. The treated slides are removed and placed into wells of a slotted tray. DETD The slides are submerged in 5% sodium thiosulfate solution for two minutes, and then transferred to a second tray with deionized water. The CFU/cm.sup.2 are determined, and compared. Top and bottom slides treated with DC-X have similar reduction in the DETD amount of biofilm, while the top slide treated with Plumr has less reduction than the bottom slide treated with Plumr. . data are statistically significant (95% confidence level), and DETD microbiologically significant. Specifically, the differences observed are greater than a 2 log reduction in the amount of biofilm, which is sign Ificant in terms of microbiological observations in the biospheric environment. L10 ANSWER 15 OF 32 USPATFULL on STN Full Text 1999:65049 USPATFULL ΑN Surgery plume filter device and method of filtering ΤI INSkalla, Randy Marc, Leesburg, GA, United States Ahrens, Carl Austin, Cincinnati, OH, United States

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Garner, Jr., Robert Keith, Miamisburg, OH, United States Wilkinson, Bradley Carl, Cincinnati, OH, United States
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- PA EnviroSurgical, Inc., Springfield, OH, United States (U.S. corporation)
- PI US 5910291 19990608
- DETD . . . a number of compounds. Representative materials include but are not limited to sodium hypochlorite, sodium perborate, sodium permanganate, and sodium **thiosulfate**. The oxidizing agent concentration in the solution is typically in the range of about 0.5 to about 30%, by weight.
- DETD . . . following: 20% potassium permanganate; 50% sodium hydroxide; 20% sodium dichloro-s-triazinetrione dihydrate; 45% potassium hydroxide; 10% sodium perborate; and 20% sodium thiosulfate. The alkaline materials listed above coated onto a porous member retained cyanide, but did not convert the cyanide to any. . .
- DETD . . . outer layer 96 of filter cartridge 86. This foam had a much finer bubble structure, with the consistency of a **shaving cream**. No foam or visible moisture escaped from the filter assembly during the runs.
- DETD . . . space. The foam provides a maximized surface area exposure of the solution to the airstream for efficient and generally rapid reduction of the undesirable surgery plume agents within the airstream. Furthermore, the amount of solution 142 is maintained so that good. . .

L10 ANSWER 16 OF 32 USPATFULL on STN

rull Text

- AN 1999:50845 USPATFULL
- TI Formulations of magnesium compounds for local application and methods of treatment using the same
- IN Marx, Alvin J., 511 Mirepoix, San Antonio, TX, United States 78232-1951 PI US 5898037 19990427
- SUMM . . . "Dose-Related Effect of Inhaled Magnesium Sulfate on Histamine Bronchial Challenge in Asthmatics," Drugs Exptl. Clin. Res., XIV(9) 609-612 (1988), and "Reduction of histamine-induced bronchoconstriction by magnesium in asthmatic subjects," Allergy, 42, 186-188 (1987).) The authors recommend that the aerosol solution be. .
- DETD . . . weight.) Administration is preferably twice daily. The composition preferably includes other conventional active ingredients such as zinc sulfide or sodium **thiosulfate** to assist in resolving comedones (blackheads) and benzoyl peroxide as an antibacterial. Corticosteroids and isotrentinoin may also be added depending. . .
- DETD After-Shave Lotion or Shaving Cream or gel.
- DETD The foregoing composition for treating acne can be modified to formulate a medicated shave lotion or **shaving cream**. Reformulation for an after-shave lotion generally includes the addition of a not insignificant amount of alcohol to the base carrier. . .
- DETD When reformulated for use as a **shaving cream**, such a composition would also include surfactants and foaming agents typically found in shaving preparations, or the magnesium compound may. . .

L10 ANSWER 17 OF 32 USPATFULL on STN

- AN 97:68148 USPATFULL
- TI Personal product compositions comprising heteroatom containing alkyl aldonamide compounds
- IN Vermeer, Robert, Nutley, NJ, United States
- PA Lever Brothers Company, Division of Conopco, Inc., New York, NY, United States (U.S. corporation)
- PI US 5653970 19970805
- DETD . . . an alkoxylated derivative thereof (preferably an ethoxylated or propoxylated derivative). Z may be derived from a reducing sugar in a reductive amination reaction and is preferably a glycityl. Examples of suitable reducing sugars include glucose, fructose, sucrose, maltose, lactose, galactose, mannose,. . . the art. In general, they are prepared by the reaction of an alkyl amine with a reducing sugar followed by reductive amination to form the corresponding N-alkyl polyhydroxyamine, which is then reacted with a fatty aliphatic ester or triglyceride in a. . .
- DETD . . . examples of hydroxy acids useful in the present invention include the β -Hydroxy acids (3-hydroxy acids) which are prepared by catalytic **reduction** of β -keto esters followed by hydrolysis or by

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the Reformatsky Reaction. Specific examples of \beta-hydroxy acids
       include, but are not. .
             . potassium chloride, calcium chloride, magnesium chloride,
DETD
       potassium bromide, ammonium chloride, sodium sulfate, potassium sulfate,
       magnesium sulfate, sodium isethionate and sodium thiosulfate. The
       ionizable salts are particularly useful for obtaining or modifying a desired viscosity. The amount of ionizable salt used depends. . .
       . . . unique characteristic properties that distinguish
DETD
       surface-active materials (surfactants) from other non-surface active
       materials. These include critical micelle concentration, surface tension
       reduction, efficiency in surface tension reduction, effectiveness in
       surface tension reduction, effectiveness of adsorption, area per
       molecule and miceIlar shape or structure. The following examples will
       show that the heteroatom containing.
       A necessary and sufficient condition for CMC formation and surface
DETD
       tension reduction is the presence of both hydrophilic and hydrophobic
       functional groups. The hydrophilic portion provides strong interaction
       between the surfactant at. . . interaction with the adjacent air
       phase. If any of these functions are not performed, then CMC formation
       and surface tension reduction will not occur. For significant surface
       activity, a properly balanced hydrophilic and hydrophobic character is
       essential. From the above table.
       Surface Tension Reduction
DETD
          . . table it can be seen that C.sub.8 /C.sub.10 oxypropyl
DETD
       D-gluconamide absorbs strongly at the water/air interface resulting in a
       significant reduction in water surface tension. This finding suggests
       that the heteroatom containing alkyl aldonamides of the invention to be
       surface-active and. .
       Effectiveness of a surfactant in reducing surface tension is defined as
DETD
       the maximum reduction in surface tension that can be obtained
       regardless of the bulk phase surfactant concentration.
       Efficiency in Surface Tension Reduction
DETD
DETD
       Since surface tension reduction depends on the replacement of water
       molecules at the interface by surfactant molecules, the efficiency of a
       surfactant in reducing. .
       As mentioned before, surface tension reduction depends on the replacement of water molecules at the interface by surfactant molecules,
DETD
       therefore the effectiveness of a surfactant in.
Prototype Shaving Cream Compositions Comprising Heteroatom
Containing Alkyl Aldonamide Compounds
          Example
Ingredients 153
                    154
                            155 156 157 --
(By Weight) %
                    응
                           응
                                응
                                   용. .
       A Foaming Conditioning Aerosol Shaving Cream Composition
       A Foaming Brushless Shaving Cream Composition
       A Foaming Shaving Gel Composition
       A Foaming Conditioning Aerosol Shaving Cream Composition
DETD
       What is claimed is:
CLM
          chloride, potassium chloride, calcium chloride, magnesium chloride,
       .
       potassium bromide, ammonium chloride, sodium sulfate, potassium sulfate, magnesium sulfate, sodium isethionate, sodium thiosulfate and mixtures thereof; (d) about 1% to 40% skin conditioning agent; and (e) water.
L10 ANSWER 18 OF 32 USPATFULL on STN
Full Text
       84:58202 USPATFULL
ΑN
       Preparations containing methylsulfonylmethane and methods of use and
TΙ
       purification
       Herschler, Robert J., 3080 NW. 8th St., Camas, WA, United States 98607
IN
PΙ
       US 4477469
                                19841016
SUMM
          . . skin treating composition containing carbamide in combination
       with one or more salts selected from the group including sodium
       chloride, sodium thiosulfate and sodium dyhydrogen phosphate.
       . . . in the tissue, and possibly by attacking existing cross-links.
SUMM
```

Thus, the benefits observed when MSM is used may result from

and elastin, or from beneficial effects of MSM on fibrinogen.

DETD

reductions in dehydration of body substances such as hyaluronic acid

Because cross-linking of collagen can so effectively be reduced by the application of MSM, and that the **reduction** can be increased by the addition of carbamide, such compositions can be administered to animal

- tissue to counter the cross-linking.
- . . . feet were thus immersed for 30 minutes, 3 times daily, for a DETD period of 2 weeks. The result was a **reduction** in discomfort and an increased skin softness and pliancy.
- . . . leave the hair easily manageable and to soften the scalp. Those DETD subjects having a dandruff problem found there was a ${\bf reduction}$ in itching, scaling and scalp inflammation after only four to five washings.
- DETD . . be more effective in hair management than a comparable commercial product. Several subjects, having persistent itching scalp problem, observed a reduction in the itching. In two subjects dandruff was reduced.
- . . 8 as a pre-shave preparation with good results. If applied DETD before retiring, or even minutes before shaving (using a commercial shaving cream), subjects obtained a more comfortable, smoother, and cleaner shave, using a blade razor, than if the commercial shaving cream was used alone. It also appeared that drag of the razor was
- When the gel was used, leg hair was easily shaved without a commercial DETD shaving cream overcoat. In all instances, use of the formulation left the skin feeling softer and smoother.
- Reductions in nail brittleness were also observed when commercial nail DETD polish removers, reformulated with MSM, were used repeatedly. Commercial nail polish. .
- L10 ANSWER 19 OF 32 USPATFULL on STN

- ΑN 82:62978 USPATFULL
- Use of calcium metasilicate (wollastonite) as a formaldehyde suppressant ΤI for urea formaldehyde resins
- Wawzonek, Stanley, 2014 Ridgeway Dr., Iowa City, IA, United States ΙN 52240
- PΙ US 4366264 19821228
- . . . line. The resin coated bubbles are forced out of the gun under SUMM pressure which results in a white foam resembling shaving cream. The resin, after mixing with the catalyst at the surface of the bubbles, begins to polymerize (cure) and within less. .
- . . finely divided suspension to urea formaldehyde resin, gives a SUMM foam from which the release of formaldehyde is markedly reduced. The reduction is also shown under high humidity conditions. In some instances, formaldehyde outgassing has been virtually eliminated from the standpoint of.
- the standpoint of. of the gun, as heretofore described. It has been found that SUMM when this additive and technique are employed, a marked reduction in formaldehyde out-gassing occurs.
- . . iodine (standardized with arsenic trioxide) to a dark blue DETD color. The excess iodine was destroyed using a $0.05~\mathrm{N}$ sodium thiosulfate and 0.01 iodine was added until a faint blue end-point was reached. The excess bisulfite was completely oxidized to sulfate.. .
- L10 ANSWER 20 OF 32 USPATFULL on STN Full Text

- 81:57504 USPATFULL ΑN
- Methylsulfonylmethane and methods of use TΙ
- INHerschler, Robert J., 3080 NW. 8th St., Camas, WA, United States 98607 19811020 PΙ
- SUMM . . skin treating composition containing carbamide in combination with one or more salts selected from the group including sodium chloride, sodium thiosulfate and sodium dyhydrogen phosphate.
- . in the tissue, and possibly by attacking existing cross-links. DETD Thus, the benefits observed when MSM is used may result from reductions in dehydration of body substances such as hyaluronic acid and elastin, or from beneficial effects of MSM on fibrinogen.
- Because cross-linking of collagen can so effectively be reduced by the DETD application of MSM, and that the reduction can be increased by the addition of carbamide, such compositions can be administered to animal tissue to counter the cross-linking.
- . . . feet were thus immersed for 30 minutes, 3 times daily, for a DETD period of 2 weeks. The result was a reduction in discomfort and an increased skin softness and pliancy.
- DETD . . . leave the hair easily manageable and to soften the scalp. Those subjects having a dandruff problem found there was a reduction in

- itching, scaling and scalp inflammation after only four to five washings.
- DETD . . . be more effective in hair management than a comparable commercial product. Several subjects, having persistent itching scalp problem, observed a **reduction** in the itching. In two subjects dandruff was reduced.
- DETD . . . 8 as a pre-shave preparation with good results. If applied before retiring, or even minutes before shaving (using a commercial **shaving cream**), subjects obtained a more comfortable, smoother, and cleaner shave, using a blade razor, than if the commercial **shaving cream** was used alone. It also appeared that drag of the razor was reduced.
- DETD When the gel was used, leg hair was easily shaved without a commercial **shaving cream** overcoat. In all instances, use of the formulation left the skin feeling softer and smoother.
- DETD **Reductions** in nail brittleness were also observed when commercial nail polish removers, reformulated with MSM, were used repeatedly. Commercial nail polish. . .
- L10 ANSWER 21 OF 32 USPATFULL on STN

- AN 77:43415 USPATFULL
- TI Thermogenic system
- IN Frump, John Adams, Terre Haute, IN, United States
 Hunsucker, Jerry Hoyt, Terre Haute, IN, United States
- PA IMC Chemical Group, Inc., Terre Haute, IN, United States (U.S. corporation)
- PI US 4042520 19770816
- AB . . . as dispensed from suitable packages. The system includes the redox reactions of hydrogen peroxide as the oxidant and as the reductant compounds of the general oxazolidine formula ##STR1## wherein R and R' may be the same or different and are selected. . .
- Another redox heating system is found in Antonelli et al., U.S. Pat. No. 3,632,516, which employs as a **reductant**, potassium **thiosulfate** and potassium sulfite with a sodium tungstate catalyst. While oxidation of **thiosulfate** ion provides a greater heat yield than does the oxidation of thiourea, the problem with the system is the fact that for every mole of **thiosulfate** oxidized, two moles of sulfate ion are generated requiring again the presence of excess base to prevent the pH from dropping so as to inhibit the formation of a soap. The **thiosulfate** and sulfite salts tend to cause gelling of soap compositions and are also highly corrosive to metal dispensing containers and. . .
- SUMM Another redox heating system is found in Margolis, U.S. Pat. No. 3,804,771, which employs as a **reductant**, xanthates, dithiocarbamates, and combinations of formaldehyde and molecular entities incorporating a ##STR2## grouping using hydrogen peroxide as the oxidant. The. . .
- DETD . . . and 2-amino-2-ethyl-1,3-propanediol. Other amino alcohols from which oxazolidine thermogens of this invention can be prepared, can themselves be prepared by **reduction** of nitroalcohols formed by condensation reactions of known nitroalkanes with formaldehyde. Some of these amino alcohols and the nitroalkanes from. . . of this invention can be prepared by the condensation reaction of the appropriate nitroalkane and formaldehyde to yield the nitroalcohol, **reduction** of the nitroalcohol to the aminoalcohol followed by another condensation reaction with formaldehyde to give the oxazolidine thermogen. These condensation and **reduction** reactions are well known in the art.
- DETD . . . One method of accomplishing this is to provide a two compartment container. One compartment to contain the oxazolidine thermogen, the **reductant**, the other to contain the hydrogen peroxide oxidant. The two compartment container allows for the components to mix immediately before. . .
- DETD . . . to illustrate the invention and not to limit it. In the specific examples given hereinbelow, the weight ratio of oxazolidine reductant mixture to oxidant is about 3:1. It is to be understood that this ratio may be widely varied to produce. . .
- DETD A hot **shaving cream** employing the thermogenic system of this invention is prepared in a two-compartment package according to the following formula:
- CLM What is claimed is:
 23. A method of heating a material selected from **shaving cream**,
 cleansing cream, hand cleanser and windshield de-icer comprising the
 steps of a. combining with the material to be heated an. . .

```
Full Text
ΑN
       75:38713 USPATFULL
       Aerosol package of product containing liquified gas
TΙ
       Laauwe, Robert H., Franklin Lakes, NJ, United States US 3896970 19750729
ΙN
PΙ
       For example only, aerosol packages of the shampoo, hair coloring and
SUMM
       shaving cream type contain formulations which are usually
       oil-in-water type emulsions, with the liquified compressed gas
       intimately dispersed in the water solution..
            . product in which the liquified compressed gas propellant is
SUMM
       intimately dispersed or dissolved. As previously indicated, shampoo,
       hair coloring and shaving cream aerosol packages are examples.
             . overrun, only a sputtering or erratic discharge is obtained.
SUMM
       This changing density is annoying in the case of shampoo and shaving
       cream formulations, as examples, but it may be disastrous in the case
       of a codispensing package where the two products in.
SUMM
       Shampoos and shaving cream formulations are usually oil-in-water
       type emulsions, with the required compressed gas propellant intimately
       dispersed in the water solution; and in. . . . The inner flexible container 5 of all four cans in each instance was
DETD
       charged with 190 grams of a shaving cream formulation and 61/2 grams
       of a liquified compressed gas propellant; namely, isobutane having a
       vapor pressure of 31 pounds per.
       . . . can, the density of the ejected product correspondingly
DETD
       increasing throughout the life of the test. In the case of a shaving
       cream formulation, for example, this increase in density would result
       in the cream becoming runnier and runnier, and finally in the.
          . . its physical characteristics from that desired, and resulted in
DETD
       excessive loss of the propellant gas with a consequent large pressure
       reduction in the package preventing complete discharge of all of the
       contents of the package. In the case of the present.
          . . packages have been made using the principles disclosed by FIG.
DETD
       2. 35 grams of a 10% water solution of sodium thiosulfate (Na.sub.2
       S.sub.\tilde{2} O.sub.3) was placed in the inner containers which corresponded to the container 15. In the outer container 5a,. . .
       . . product on the other end of the plate. In this manner it was
DETD
       possible to analyze the percent of sodium thiosulfate in the initial
       and final portions of the extruded product. Three of such packages were
       tested in the above manner.
       . . the container 5a had a collapse pressure of less than 2 pounds \,
DETD
       per square inch gauge fluid pressure. Therefore, the reduction it made
       in the pressure applied to the gasified product by the liquified gas propellant was negligible. Obviously the use. . .
    ANSWER 23 OF 32 USPATFULL on STN
L10
Full Text
       75:8529 USPATFULL
ΑN
ΤI
       NON-PRESSURIZED PACKAGE CONTAINING SELF-HEATING PRODUCTS
IN
       Schmitt, William H., Elmhurst, IL, United States
PA
       Alberto Culver Company, Melrose Park, IL, United States (U.S.
       corporation)
PΙ
       US 3866800
                                19750218
       . . an oxidant in an aqueous medium, and the other of said
AΒ
       compartments containing a substantially anhydrous composition which
       includes a reductant, a water-soluble organic solvent, a compressible
       gas which is substantially water-insoluble but which is soluble in said
       organic solvent, said.
                storage of the two parts of the compositions, one of said parts
SUMM
       containing an oxidant and the other containing a reductant, said two
       parts being adapted to be dispensed simultaneously with mixing whereby,
       on being admixed, an exothermic reaction occurs. Each of the two-part
       compositions contains various ingredients, in addition to their
       respective oxidant and reductant, including substantial proportions of
       water. The packages or containers in which said two-part compositions
       are packaged and from which they.
       are packaged and from which they. . .
. . of foam. While they employ separate compositions, one of which
SUMM
       contains an oxidant and the other of which contains a reductant, and
       which separate compositions when admixed together evolve heat and give
       off a gas or form a foam, they achieve.
```

. . . in an aqueous medium. In the other of said compartments there

L10 ANSWER 22 OF 32 USPATFULL on STN

SUMM

is housed a substantially anhydrous composition which includes a **reductant**, a water-soluble organic solvent, a compressible gas which is substantially water-insoluble but which is soluble in said organic solvent, said. . . for instance, of the order of 70°C., depending upon a number of factors including the selection of particular oxidants and **reductants**.

- The reductant-containing composition which, for convenience, may be called the B composition, will generally contain the reductant (or reducing agent) in proper amount to react with the quantity of oxidant in the A composition. Various reductants can be employed such as sodium or potassium salts of sulfurous acid or thiosulfuric acid as, for instance, sodium sulfite or potassium thiosulfate. Other reductants which can be utilized are shown, for example, in the aforementioned patents. It is particularly preferred to use sodium sulfite.
- SUMM The proportions of the oxidant and **reductant**, in relation to each other, are variable and will depend, of course, upon the particular oxidants and **reductants** utilized, generally being employed in approximately the proper stoichiometric proportions to achieve the exothermic reaction. In the case of the use of hydrogen peroxide as the oxidant and sodium sulfite as the **reductant**, 1 mol % of hydrogen peroxide is desirably used with about 3.7 mol % of sodium sulfite on the anhydrous. . .
- SUMM In addition to the **reductant**, or mixtures of **reductants**, the B composition will also contain a non-aqueous organic solvent in which the **reductant** is soluble or dispersible or suspendable, and in which organic solvent compressed or compressible gas or gases are dissolved whereby. . .
- SUMM . . . at room temperatures, or use temperatures, namely, the temperatures which are produced by the interaction of the oxidant and the **reductant** when the A and B compositions are mixed together (at ambient or atmospheric pressure) and which exists as a liquid. . .
- SUMM . . . present invention includes two flexible or collapsible compartments, one for holding the oxidant-containing composition and the other for holding the **reductant**-containing composition, the construction being such that, when the package or container is squeezed in the hand substantially equal internal pressures
- in the hand, substantially equal internal pressures. . .

 DETD . . . desired unformity of collapsing, creating essentially equal pressures within each of the compartments (15, 16), as well as essentially equal reductions in compartment volumes. Both of the tube elements can be simultaneously compressed by the grasp of a single hand, as. . .
- DETD . . . the dispenser container, compositions A and B are filled into their respective compartments, such as the compartment 16 for the reductant-containing composition before the end closure 17 is formed, and compartment 15 for oxidant-containing composition. The heat sealed end closure is. . .
- DETD . . . substantial content of water, the water constituting about 37 percent of the (b) mixture and about 30 percent of the **shaving cream** as a whole. The gas is suspended in a metastable state in the examples as described in the above patent,. . .
- CLM What is claimed is:
 - . . an oxidant in an aqueous medium, and the other of said compartments containing a substantially anhydrous composition which includes a reductant, a water-soluble organic solvent, a compressible gas which is substantially water-insoluble but which is soluble in said organic solvent, said. . .
- CLM What is claimed is:
 - compartments containing a substantially anhydrous composition which
 includes a sodium or potassium salt of sulfurous or thiosulfuric acid as
 a reductant, a water-soluble organic solvent, a compressible gas which
 is substantially water-insoluble but which is soluble in said organic
 solvent, said. . .
- CLM What is claimed is:
- . . . 2, in which the oxidant is a 1 to 20 percent aqueous solution of hydrogen peroxide, and in which the **reductant** is
- CLM What is claimed is:
 7. The package of claim 6, in which the **reductant**-containing composition includes stearic acid, coconut oil fatty acids, diethanolamine, a water-soluble alkylene glycol, cetyl alcohol, and a polyethylene glycol

- CLM What is claimed is:
 8. The package of claim 3, in which the vapor pressure of the reductant-containing composition is in the range of from 0 to 10 psig at
- CLM What is claimed is:
 11. The package of claim 10, in which the organic solvent in said
 reductant-containing composition comprises a water-soluble alkylene
- L10 ANSWER 24 OF 32 USPATFULL on STN

- AN 74:5585 USPATFULL
- TI AEROSOL PACKAGE
- IN Laauwe, Robert H., 237 Ridge Rd., Franklin Lakes, NJ, United States 07417
- PI US 3788521 19740129
- SUMM For example only, aerosol packages of the shampoo, hair coloring and **shaving cream** type contain formulations which are usually oil-in-water type emulsions, with the liquified compressed gas intimately dispersed in the water solution.. . .
- SUMM . . . product in which the liquified compressed gas propellant is intimately dispersed or dissolved. As previously indicated, shampoo, hair coloring and **shaving cream** aerosol packages are examples.
- SUMM . . . overrun, only a sputtering or erratic discharge is obtained. This changing density is annoying in the case of shampoo and **shaving cream** formulations, as examples, but it may be disastrous in the case of a codispensing package where the two products in. . .
- SUMM Shampoos and **shaving cream** formulations are usually oil-in-water type emulsions, with the required compressed gas propellant intimately dispersed in the water solution; and in. . .
- dispersed in the water solution; and in. . . The inner flexible container 5 of all four cans in each instance was charged with 190 grams of a **shaving cream** formulation and 6 1/2 grams of a liquified compressed gas propellant; namely, isobutane having a vapor pressure of 31 pounds. . .
- DETD . . . can, the density of the ejected product correspondingly increasing throughout the life of the test. In the case of a **shaving cream** formulation, for example, this increase in density would result in the cream becoming runnier and runnier, and finally in the. . .
- DETD . . . its physical characteristics from that desired, and resulted in excessive loss of the propellant gas with a consequent large pressure reduction in the package preventing complete discharge of all of the contents of the package. In the case of the present. . .
- DETD . . . have been made using the principles disclosed by FIG. 2. 35 grams of a 10 percent water solution of sodium **thiosulfate** (Na.sub.2 S.sub.2 O.sub.3) was placed in the inner containers which corresponded to the container 15. In the outer container 5a,. . .
- DETD . . . product on the other end of the plate. In this manner it was possible to analyze the percent of sodium **thiosulfate** in the initial and final portions of the extruded product. Three of such packages were tested in the above manner. . .
- DETD . . . the container 5a had a collapse pressure of less than 2 pounds per square inch gauge fluid pressure. Therefore, the **reduction** it made in the pressure applied to the gasified product by the liquified gas propellant was negligible. Obviously the use. . .
- L10 ANSWER 25 OF 32 USPATOLD on STN

- AN 1974:66209 USPATOLD
- TI THERMOGENIC SYSTEMS
- IN MARGOLIS E
- PA DART INDUSTRIES INC.
- PI US 3804771 A 19740416
- DETD Another redox heating system is found in Antonell et al., U.S. Pat. 3,632,516, which employs as a **reductani** potassium **thiosulfate** or a mixture of potassium thic sulfate and potassium sulfite with a sodium tungstat catalyst. While oxidation of **thiosulfate** ion provides greater heat yield than does the oxidation of thioures the problem with this system is the fact that for ever mole of **thiosulfate** oxidized, two moles of sulfate io are generated requiring the presence of excess base t prevent the pH from dropping precipitously and inhibi ing the formation of a soap. The **thiosulfate** and sulfit salts tend to cause gelling of soap compositions and ai also highly corrosive to metal

- dispensing containers an.
- DETD . . above mixture reached a temperature 11 C. higher and reacted more rapidly in the presence of 0.1% catalyst than did thiosulfate with 0.5% catalyst (the catalyst being sodium molybdate). The same reductant and oxidant combination without sulfite present gave identical results.
- . . system wherein the two phases are mixed immediately before use. DETD One phase contains an oxidant and the other contains a reductant whereby mixing the two evolves enough heat to produce a sensible rise in the temperature of the dispensed mixture. A. . . at least C. above room temperature is generally considered desirable. In the specific examples given hereinbelow, the weight ratio of reductant to oxidant was about 3:1. This 4,7 1 effected a temperature rise greater than F. in the dispensed product. It.
- . . a two-part system within isolated compartments in a dispensing DETD package. The hydrogen peroxide being in one part and the thermogen (reductant) in the other part. The thermogen part may contain the consumertype ingredients if compatible. It is to be understood that.
- DETD As mentioned, the oxidant and **reductant** compositions are packaged within a container in such a way as to remain isolated from each other. Valve means are.
- The proportion of oxidants and **reductants** to the total composition DETD depends upon how much heat is desired, how much heat is required to heat the composition. . . dissipated. Generally, a much higher temperature rise will be utilized in hot windshield deicing compositions or engine degreasing compositions than shaving cream or cleansing preparations or other personal-use products. EXAMPLE 1.HOT **SHAVING CREAM**
- DETD
- L10 ANSWER 26 OF 32 USPATOLD on STN

- ΑN 1972:58646 USPATOLD
- SELF HEATING LATHER ΤI
- ΙN BODEN HERBERT
 - ANTONELLI JOSEPH A
- E. I. DU PONT DE NEMOURS AND COMPANY PA
- US 3632516 A 19720104 PΙ
- DETD Another system, Moses et al., U.S. Pat. 3,341,418, employs a redox reaction with non-electrolyte reductants contained in a soap solution and hydrogen peroxide or urea hydrogen peroxide oxidants. The particular reductants utilized are thiourea and various thiobarbituric acid derivatives. The reaction of hydrogen peroxide with thiourea is accompanied by an unpleasant.
- . in Hayes et al., U.S. Pat. 3,326,416 and employs heating by DETD redox reaction with hydrogen peroxide oxidant and potassium sulfite reductant. The high concentration of potassium sulfilte necessary to effect a satisfactory temperature increase has a rapid corrosive effect on the. .
- DETD . . lather to a C. increase in temperature, assuming the ratio of the volume of hydrogen peroxide to solution containing the reductant is 1:4.
- leaving little room for the generated gas, it is readily DETD appreciated that the developed pressure would be very high. Potassium thiosulfate would appear, from consideration of the small amounts required as shown in Table 1, to be an excellent reductant. Further, the thiosulfate salt can be introduced into soap solution to about 12.5 wt. percent, a concentration theoretically more than adequate to heat.
- . of total composition, (B) Hydrogen peroxide which is capable of DETD reacting with rapid generation of heat when contacted with a reductant, (C) A reductant composition capable of reacting at 25 room temperature with said hydrogen peroxide to produce heat, said reductant composition being selected from the group consisting of:
- (a) Potassium thiosulfate and a catalytic amount of sodium, tungstate DETD (b) A mixture of potassium thiosulfate and potassium sulfite and a catalytic amount of sodium tungstate; materials (B) and (C) being
- isolated from sach other when. . . . pressurized dispenser, said lather being heated by a redox DETD reaction between separately contained but co-dispensed hydrogen peroxide oxidant and a reductant composition contained in a soap solution, the improvement comprising the use of a reductant composition selected

from the group consisting of:

- DETD (A) Potassium **thiosulfate** and a catalytic amount of sodium tungstate, (B) A mixture of potassium **thiosulfate** and potassium sulfite and a catalytic amount of sodium tungstate.
- DETD . . . invention comprises a warm aqueous foam composition obtained by intimately GO contracting an aqueous foamable composition with H2O2 and a **reductant** composition described as above.
- DETD Any dispensing container may be employed in the package of this invention provided the container maintains the oxidant and the **reductant** in separate compartments prior to dispensing them. One such container is depicted in the drawing and is described as follows.
- DETD . . . from the pressurized container. The type and concentration of agent is readily determined by one skilled in the art. For **shaving foam**, however, the composition usually contains about four to about thirty percent by weight of foam producing agent. Useful such agents.
- DETD The reactants of the present invention are stored separately within the dispenser, one reactant (the reductant composition) being maintained in the aqueous dispersion of a foamable composition. When this reductant composition is the mixture of potassium thiosulfate and potassium sulfite in the presence of catalytic amounts of sodium tungstate, the mole ratio of the potassium thiosulfate to potassium sulfite is not critical; however, preferably the mole ratio should be about 0.4 to 0.9. Also for good results, the amount of the **reductant** composition in the aqueous dispersion should range from 3% to 8% by weight. The amount of catalyst present should range from .05% to .85% by weight of the **reductants** employed. The other reactant (hydrogen peroxide oxidant) is stored in an inner container, preferably a collapsible compartment within and smaller. . . outside container, the amount of hydrogen peroxide oxidant stored therein being chemically equivalent to or less than the amount of reductant present. The liquid reactants are dispensed simultaneously through an outlet after passing through the valve at the top of the outer container. In general, the dispersing ducts of the container are adjusted so that an excess of the reductant with catalyst-up to 20%-is combined with the hydrogen peroxide in order to avoid the possibility of an excess amount of. . . . stored at room temperature until needed but had to be rewarmed
- DETD . . . stored at room temperature until needed but had to be rewarmed before blending with part B. Part B contains the **reductant** composition (described as material (C) in this invention) and was prepared as follows:
- DETD Part B Deionized water was heated to C. and **reductants** (material (C) variable percent, see examples)1, potassium hydroxide (1.2%) and triethanolamine (3.5%) were dissolved in the water.
- DETD . . . after reaction as measured with pH paper. Raising the pH of the soap solution, of course, promotes the reaction of **thiosulfate** ion with hydrogen peroxide.
- DETD In the examples, except as otherwise indicated, 20 10 grams of the above-described soap solutions containing **reductant**(s) in proportions stated in each example were reacted with 5 g, aqueous hydrogen peroxide of the stated concentration. The 4:1. . .
- DETD Weight percent of **reductants** in the examples is :based 3n the weight of the soap solution. Weight percent of hydrogen peroxide is the concentration. . .
- DETD EXAMPLE 7 This: example and the following example Demonstrate the effectiveness: of sodium tungstate in S203=/S03= combined **reductant** system. It is seen that 0.25% sodium tungstate effects a reaction satisfactory in all respects.
- DETD . . . weight of soap solution for each part of weight of hydrogen peroxide solution, the ratio of equivalents of oxidant to **reductants** is 1.0. A slight excess of **reductant** is usually preferred.
- DETD EXAMPLE This example shows in two concentrations of hydrogen peroxide the performance replication of pressurized dispensers using K2S2C>3-Na2WO4 reductant, over a period of 46 days.
- DETD EXAMPLE 11 K2SO3 (4 wt. percent) **reductant** in soap solution was combined with H2O2 (3.5 wt. percent) where percent of theoretical equivalents of H2O2 present was 102.. . .

 DETD EXAMPLE 12 The **reductant** employed in the soap solution was K2S2Os (3.0)
- DETD EXAMPLE 12 The **reductant** employed in the soap solution was K2S2Os (3.0 wt. percent) and was combined with H2O2 (8.2 wt. percent) where the.
- DETD This example combined K2S2O3 (4.0 wt. percent) **reductant** in soap solution with H2O2 (8.2 wt. percent) where the percent of theoretical equivalents of H2O2 present was 71.7. As. . .

- of total composition, (B) hydrogen peroxide which is capable of reacting with rapid generation of heat when contacted with a reductant, (C) a reductant composition present in an amount between 3 and 8% based on the weight of (A) present, said **reductant** composition being capable of reacting at room temperature with the said hydrogen peroxide to produce heat, and said reductant composition being selected from the group consisting of (a) potassium thiosulfate and a catalytic amount of sodium tungstate, and (b) a mixture of potassium thiosulfate and potassium sulfite and a catalytic amount of sodium tungstate the amount of (B) present being chemically equivalent to or. . . is being conveyed toward said outlet.
 - 2. A package according to claim 1 in which the re-ductant composition is potassium thiosulfate in the presence of catalytic amounts of sodium tungstate.
 - 3. A package according to claim 1 in which the re-ductant composition is a mixture of potassium thiosulfate and potassium sulfite in the presence of catalytic amounts of sodium tungstate.
 - 4. A package according to claim 1 in. .
- L10 ANSWER 27 OF 32 USPATOLD on STN $\underline{\text{Full Text}}$

- 1963:41424 USPATOLD NA
- ΤI Protective coating
- SCHUSTER LUDWIG K BALDI JR ALFONSO L
- US 3112231 PΙ 19631126 Α
- The properties of the coating can be varied by the type of reducing DETD agent, its amount, and the **reduction** temperature. The reducing agent is preferably one that does not leave water-soluble salts in the final coating layer. Compatible reducing.
- The amount of reduction depends upon the type and amount of reducing DETD agent used and temperature of reduction. A general rule to follow is the higher the reducing agent content and the higher the **reduction** temperature the more **reduction** of the hexavalent chromium in the chromic acid. Coatings with to 70% **reduction** of the hexavalent chromium are more highly colored, having a brown to brownish green appearance. Coatings having conversions of hexavalent. .
- DETD . . . well as the proper conversion temperature. A general rule is to use a lower CrO3-to reducing agent ratio, a higher reduction temperature, and most effective, a combination of both. For coatings of highest conversion, it is preferable to incorporate the least. . the curing operation to effect maximum conversion. For example, to obtain a 1 milligram per square foot coating having 95% reduction, it is better to use, in the case of sucrose, a ratio of 3 parts by weight of CrO3 to.
- . . aqueous solution of NaOH by weight at F. or higher, titrating DETD the hexavalent content of the resulting solution with sodium thiosulfate in the presence of potassium iodide, and subtracting this content from the total chromium content which is determined by oxidizing another dissolved coating sample with H2O2 and again titrating with sodium thiosulfate in the same way.
- . . . dissolving operations because of the chemical action on the DETD metal. Apparently the nascent hydrogen generated by the reaction effects the reduction. The hexavalent chromium content that any coating bath provides can also be determined by applying the coating bath in exactly.
- . agent. Longchained alkyl sulfates are suitable and tertiary DETD butyl alcohol will be effective although it does not cause any appreciable reduction and is generally required to be in higher concentration, e.g. 0.5%, to provide really effective go wetting. In general, however,.
- DETD . . of the solution in which the coating is dissolved, this content can be obtained by titrating the solution with sodium thiosulfate as referred to above.
- The following example shows the corrosion reduction obtained by the DETD resin-chromic acid coating:
- . . preliminary nitric acid etch it used, is suitable for many DETD commercial purposes such as pressure-type containers for solutions of self-lathering shaving cream as described in U.S. Patent 2,655,480, granted October 31, 1953. The presence of the resin not only improves the adhesion.

```
. . paint or enamel layer. Without the etch and without the resin,
DETD
               the protection although poorer, is still effective for the
                shaving-cream container use. On other metals such as copper, and
                chromium type stainless iron alloys similar improvements are provided by
                the. . .
L10 ANSWER 28 OF 32 USPATOLD on STN
Full Text
               1953:22984 USPATOLD
ΤI
                One step photographic transfer process
                LAND EDWIN H
IN
                                                           A 19530728
PΙ
               US 2647056
               . . . from a suitable container as, for example, a tubular, collapsible, metallic container of the type used for containing tooth % \left( 1\right) =\left( 1\right) \left( 1\right) 
DETD
                paste, shaving cream, and the like. It will be observed (Pig. 1)
               that the liquid is located, upon dispensation, in a fairly concentrated.
                                a soluble silver complex with the undeveloped silver halide of
DETD
               the photosensitive layer are sodium thiosulf ate, sodium thiocyanate,
                ammonium thiosulfate, ammonia and sodium cyanide.
DETD
                . . at room temperature, and the solution is mixed therein for
               approximately one hour. Thereafter, the sodium sulfite, sodium hydroxide, sodium thiosulfate and citric acid are added to the
                solution, the addition being effected in an inert atmosphere, for
               example of nitrogen.. . . . Hydroquinone ----- g- 33 Sodium thiosulfate
DETD
                ----- g 14 An aqueous solution of Hercules or Dow
                carboxymethyl cellulose, sodium salt, medium viscosity, consisting of
                200 g.. . in the same way as the materials of Example 1, or in the
                alternative, the sodium sulfite, hydroquinone, and sodium thiosulfate
                are dissolved in the water, and the sodium carboxymethyl cellulose
                solution is then added and thoroughly mixed therewith.
DETD
                                                    _ ----- g lo.o Sodium thiosulfate _
               g__ 100 SQdium alglnate cellulose ethers such as ethyl Aqueous solution
               of medium viscosity sodf0mncarb xlmel f! cellulose e. . . tively high
               speed orthochromatic films, e. g Sodium hydroxide ______ 5
Eastman Kodak Verichrome film having an ASA Sodium thiosulfate 1.5
               Sodium sulfite ______ 9 high speed panchromatic emulsions, e. g Eastare dissolved in cc. of water, and the solution. . .
               Sodium h droxide _____
                                                                                                         ____ uo godium thiosulfate
DETD
                                                        . ____ Jg Citric acid _
               Preferably, when these higher speed emulsions are USed, the sodium
DETD
               thiosulfate content of each Oj e preceding processing agents of Figs.
                1 is substantially increased, being preferably quadrupled. Improvements
                in the.
                                  when dissolved in the liquid of the processing composition. For
DETD
                example, it is possible to provide the ions, e. g thiosulfate,
                cyanide, or thiocyanate ions, which form the soluble silver complex with
                the unexposed silver halide in the foregoing process by providing a
               thiosulfate, cyanide, or thiocyanate salt on the image-receiving layer
                6 which will dissolve in the processing liquid.
                . . . and dried after the immersion and is then dipped for thirty
DETD
               seconds in another bath which contains 25 of sodium thiosulfate and
                100 cc. of water This second treatment causes 5 there j added one the
                formation of lead thiosulfate in the surface of the baryta paper. The
                coating of lead thiosulfate may also be provided, for example, by
                adding to a 20% water solution of neutral lead acetate a 5% xvater
                solution of sodium thiosulfate and then rubbing the precipitate
               produced by this mixture onto the baryta paper.
. . of the processing agent and caused to develop the latent image
DETD
                in the photosensitive emulsion and to participate in the reduction of
                the soluble silver halide complex to silver. Sheets 1 0 and 1 6 are kept
                assembled for approximately one.
CLM
provide all the liquid for the development of said latent image, which
               processing agent is alkaline and comprises hydroquinone, sodium
                thiosulfate and sodium carboxymethyl cellulose in a sufficient
                concentration to impart to said processing agent a viscosity at 24 C.
development, of said latent image, said processing agent comprising, an
                alkaline aqueous solution of sodium carboxymethyl cellulose,
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hydroquinone and,; sodium thiosulfate and having, a viscosity, at 24

Ci to excess of 1000 centipoises spreading said processing agent in a layer between. . .

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L10 ANSWER 29 OF 32 USPAT2 on STN
Full Text
ΑN
       2005:131808 USPAT2
       Block polymers, compositions and methods of use for foams, laundry
ΤI
       detergents, shower rinses and coagulants
ΙN
       Yeung, Dominic Wai-Kwing, Ontario, CANADA
       Bergeron, Vance, Antony, FRANCE
       Bodet, Jean-Francois, Mason, OH, UNITED STATES
       Sivik, Mark R., Ft. Mitchell, KY, UNITED STATES
       Kluesener, Bernard W., Harrison, OH, UNITED STATES
       Scheper, William M., Lawrenceburg, IN, UNITED STATES
       Rhodia Inc., Cranbury, NJ, UNITED STATES (U.S. corporation)
US 7335700 B2 20080226
PΑ
PΙ
AΒ
          . . fabric cleaning compositions. The polymeric material is also
       effective in oil well treating foam, fire-fighting foam, hard surface
       cleaning foam, shaving cream, post-foaming shaving gel,
       dephiliatories and as a coaqulant/retention aid for titanium dioxide in
       paper making.
SUMM
          . . aspect, the present invention provides methods and compositions
       for personal care, such as shampoos, soaps (hand washes and body
       washes), shaving cream, post foaming shaving gel, and
       dephiliatories, oil field foam, fire fighting foam, agrochemical foam,
       hard surface (e.g., bathroom tile) foam cleaner, shower rinse, fabric.
DETD
       For the other uses of these block polymers, such as personal care (e.g.,
       hand wash, body wash, shampoo, shaving cream, post-foaming shaving gel, diphiliatories), oil field foam, fire fighting foam, agrochemical
       foam, hard surface (e.g., bathroom tile) cleaner foam, shower rinse, and
       coagulants.
DETD
        . . or an alkoxylated derivative (preferably ethoxylated or
       propoxylated) thereof. Z preferably will be derived from a reducing
       sugar in a reductive amination reaction; more preferably Z will be a
       glycityl. Suitable reducing sugars include glucose, fructose, maltose,
       lactose, galactose, mannose, and.
       . . . in the art. In general, they can be made by reacting an alkyl
DETD
       amine with a reducing sugar in a reductive amination reaction to form
       a corresponding N-alkyl polyhydroxyamine, and then reacting the N-alkyl
       polyhydroxyamine with a fatty aliphatic ester or.
       . . . provide cleaning performance benefits. Said enzymes include
DETD
       enzymes selected from cellulases, hemicellulases, peroxidases,
       proteases, gluco-amylases, amylases, lipases, cutinases, pectinases,
       xylanases, reductases, oxidases, phenoloxidases, lipoxygenases,
       ligninases, pullulanases, tannases, pentosanases, malanases,
       \beta-glucanases, arabinosidases or mixtures thereof. A preferred
       combination is a detergent composition.
                of the present invention. They can be any conventional
DETD
       antioxidant used in detergent compositions, such as 2,6-di-tert-butyl-4-
       methylphenol (BHT), carbamate, ascorbate, thiosulfate,
       monoethanolamine (MEA), diethanolamine, triethanolamine, etc. It is
       preferred that the antioxidant, when present, be present in the
       composition from about. .
       . . (e.g., sodium and potassium dichloroisocyanurates), peroxyacid
DETD
       bleaches (e.g., diperoxydodecane-1,12-dioic acid), inorganic percompound
       bleaches (e.g., sodium perborate), antioxidants as optional stabilizers,
       reductive agents, activators for percompound bleaches (e.g.,
       tetraacetylethylenediamine and sodium nonanoyloxybenzene sulfonate),
       soil suspending agents (e.g., sodium carboxymethyl cellulose), soil
       anti-redisposition.
DETD
         . . the reactor to form the polymerization mixture. The initiator
       can be a single organic or inorganic compound or a redox
       (reduction/oxidation) system of two or more compounds. For example,
       U.S. Pat. No. 5,863,526, incorporated herein by reference in its
       entirety, discloses. .
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L10 ANSWER 30 OF 32 USPAT2 on STN

Full Text

AN 2002:294312 USPAT2

TI External compositions for skin comprising sphingoglycolipid

IN Murata, Katsumi, Tokyo, JAPAN

```
Nozawa, Takashi, Tokyo, JAPAN
       Hara, Hisako, Tokyo, JAPAN
       Asai, Michiki, Tokyo, JAPAN
       Wakayama, Sachio, Tokyo, JAPAN
       Kibun Food Chemifa Co., Ltd., Tokyo, JAPAN (non-U.S. corporation) US 6514744 B2 20030204
PA
PΙ
       . . shadow, cream or milky lotion, toilet lotion, perfume, face
SUMM
       powder, facial oil, hair-care cosmetics, hair dye, jelly fragrance,
       powder, pack, shaving cream, shaving lotion, suntan oil, anti-suntan
       oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening
       cream, foundation, powdery fragrance, cheek rouge, mascara,. .
       . . . shadow, cream or milky lotion, toilet lotion, perfume, face
SUMM
       powder, facial oil, hair-care cosmetics, hair dye, jelly fragrance,
       powder, pack, shaving cream, shaving lotion, suntan oil, anti-suntan
       oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening
       cream, foundation, powdery fragrance, cheek rouge, mascara,.
SUMM
       . . . the section for polyol), inorganic salts (e.g. sodium chloride,
       sodium hydrogen carbonate, sodium carbonate, borax, sodium sulfate,
       sodium sulfide, sodium thiosulfate, sodium sesquicarbonate, magnesium
       oxide, calcium carbonate, magnesium carbonate, potassium chloride,
       potassium sulfide), cultured lactic acid bacteria, sterols (e.g.
       cholesterol, provitamin. . .
       . . . - - - - -
Oxidation on O-F d - - - -
Alkalization on - - - - -
O-F medium
Reduction of - - - - -
nitrate to nitrite
Simmons' citric - - - - -
acid agar
Christensen's d + +. . .
      . . . -
Lysine decarboxylase - - - - -
Ornithine - - - - -
decarboxylase
Selenic salt - - - - -
reduction
Casein hydrolysis - - - - -
DNase (HCl method) + + + + + +
Thomley arginine - - - - . .
Tyrosine hydrolysis + + + + + +
Brown dye production d + + + + +
on tyrosine agar
medium
Nitrite reduction - - - - -
Growth on PHBA + + + +
Endogenous PHBA + + + + +
L10 ANSWER 31 OF 32 USPAT2 on STN
Full Text
ΑN
       2002:164425 USPAT2
       Cosmetic, personal care, cleaning agent, and nutritional supplement
ΤI
       compositions and methods of making and using same
IN
       Lee, Sean, Karlsruhe, GERMANY, FEDERAL REPUBLIC OF
       Kessler, Susanna, Ergolding, GERMANY, FEDERAL REPUBLIC OF
       Forberich, Oliver, Oberursel, GERMANY, FEDERAL REPUBLIC OF
       Buchwar, Claire, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF
       Greenspan, David C., Gainesville, FL, UNITED STATES Schott AG, Mainz, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)
PA
       US 7250174
                        B2 20070731
PΙ
         . . also be evaporated to provide a solid material with
DETD
       anti-microbial properties. These compositions can be used in situations
       where elimination, reduction, or prevention of microbes, including but
       not limited to bacteria, viruses, and fungi would be advantageous, for
       example, in cosmetic.
       . . effect of bioactive glass. The anti-inflammatory effects of
DETD
       bioactive glass make it particularly useful in skin care formulations by
       promoting reductions in irritation, itching, redness and rashes.
       The present invention provides for novel formulations of shaving
DETD
       cream and gel products by incorporating bioactive glass into a
       combination of any of the above-listed ingredients.
```

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diameter. The occlusion of these tubules leads to a significant
       reduction in the amount of sensitivity after, for example, periodontal
       surgery. A particularly effective combination includes a mixture of
       particles, wherein. . . . bicarbonate, sodium chloride, sodium citrate, sodium phosphate, oxymetazoline HCl, hydroxpropyl methyl cellulose, pheniramine maleate,
DETD
       liquifilm, phenylephrine HCl, sodium acetate, sodium thiosulfate and
       hydrochloric acid.
DETD
       . . . comprised a sol-gel-derived bioactive glass powder mixed with a
       commercially available facial cream. This product gave the appearance of
       wrinkle reduction and skin-tightening when applied to the face.
       The reduction in microbial growth correlates with a pH increase in the
DETD
       medium.
                solution would significantly increase the hardness of the
DETD
       solution. It was therefore expected that calcification would increase
       resulting in a reduction of cleaning action, so that these glasses
       would not be suitable for use as washing and cleaning agents. Moreover,
       it. .
L10 ANSWER 32 OF 32 USPAT2 on STN Full Text
       2002:12038 USPAT2
ΝA
       External composition for skin comprising sphingoglycolipid
ΤI
ΙN
       Murata, Katsumi, Tokyo, JAPAN
       Nozawa, Takashi, Tokyo, JAPAN
       Hara, Hisako, Tokyo, JAPAN
       Asai, Michiki, Tokyo, JAPAN
       Wakayama, Sachio, Tokyo, JAPAN
       Kibun Food Chemifa Co., Ltd., Tokyo, JAPAN (non-U.S. corporation) US 6348201 B2 20020219
PA
PΤ
       . . . shadow, cream or milky lotion, toilet lotion, perfume, face
SUMM
       powder, facial oil, hair-care cosmetics, hair dye, jelly fragrance,
       powder, pack, shaving cream, shaving lotion, suntan oil, anti-suntan
       oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening
       cream, foundation, powdery fragrance, cheek rouge, mascara,. .
       . . . shadow, cream or milky lotion, toilet lotion, perfume, face
SUMM
       powder, facial oil, hair-care cosmetics, hair dye, jelly fragrance,
       powder, pack, shaving cream, shaving lotion, suntan oil, anti-suntan
       oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening
       cream, foundation, powdery fragrance, cheek rouge, mascara,. .
       . . . the section for polyol), inorganic salts (e.g. sodium chloride,
SUMM
       sodium hydrogen carbonate, sodium carbonate, borax, sodium sulfate,
       sodium sulfide, sodium thiosulfate, sodium sesquicarbonate, magnesium
       oxide, calcium carbonate, magnesium carbonate, potassium chloride,
       potassium sulfide), cultured lactic acid bacteria, sterols (e.g.
       cholesterol, provitamin. .
DETD
(kovacs)
Oxidation d - - - -
on O-F
medium
Alkalization - - - - -
on O-F
medium
Reduction of - - - - -
nitrate to
nitrite
Simmons' - - - - -
citric acid
agar
Christen- d. . . . - - - -
agar
decar-
boxylase
Ornithine - - - - -
decar-
boxylase
Selenic - - - - -
reduction
Casein - - - - -
```

. . fit inside dentin tubules that are approximately 1-2 microns in

DETD

```
hydrolysis
DNase + + + + + +
 (HCl
method)
Thomley - - - - \cdot \cdot \cdot + +
hvdrolvsis
Brown dye d + + + +
production
on tyrosine
agar medium
Nitrite - -
reduction
Growth on + + + + + +
PHBA
Endogenous + + + + + +
PHBA
accumulation
Fluorescent - - -.
                   What is claimed is:
                          shadow, cream or milky lotion, toilet lotion, perfume, face powder,
                   facial oil, hair-care cosmetics, hair dye, jelly fragrance, powder,
                   pack, shaving cream, shaving lotion, suntan oil, anti-suntan oil, suntan lotion, sun-screening lotion, suntan cream, sun-screening cream,
                   foundation, powdery fragrance, cheek rouge, mascara,.
CLM
                   What is claimed is:
                   5. The method of claim 4 wherein said composition is a toilet soap,
                   shampoo, cleaning foam or shaving cream.
CLM
                   What is claimed is:
                   23. A method of using the external composition for skin prepared by the
                   method according to claim 7 as a. . . shadow, cream or milky lotion,
                   toilet lotion, perfume, face powder, facial oil, hair-care cosmetics,
                   hair dye, jelly fragrance, powder, pack, shaving cream, shaving
                   lotion, suntan oil, anti-suntan oil, suntan lotion, sun-screening
                   lotion, suntan cream, sun-screening cream, foundation, powdery
                   fragrance, cheek rouge, mascara,.
L10 ANSWER 23 OF 32 USPATFULL on STN
Full Text
                   75:8529 USPATFULL
AN
                   NON-PRESSURIZED PACKAGE CONTAINING SELF-HEATING PRODUCTS
ΤI
                   Schmitt, William H., Elmhurst, IL, United States
TN
PΑ
                   Alberto Culver Company, Melrose Park, IL, United States (U.S.
                   corporation)
                   US 3866800
                                                                                   19750218
PΙ
                                  . an oxidant in an aqueous medium, and the other of said
AB
                   compartments containing a substantially anhydrous composition which
                   includes a reductant, a water-soluble organic solvent, a compressible
                   gas which is substantially water-insoluble but which is soluble in said
                   organic solvent, said. .
                   . . storage of the two parts of the compositions, one of said parts % \left( 1\right) =\left( 1\right) \left( 1\right)
SUMM
                   containing an oxidant and the other containing a reductant, said two parts being adapted to be dispensed simultaneously with mixing whereby,
                   on being admixed, an exothermic reaction occurs. Each of the two-part
                   compositions contains various ingredients, in addition to their
                   respective oxidant and reductant, including substantial proportions of
                   water. The packages or containers in which said two-part compositions
                   are packaged and from which they.
                   are packaged and from which they. . .
. . of foam. While they employ separate compositions, one of which
SUMM
                   contains an oxidant and the other of which contains a reductant, and
                   which separate compositions when admixed together evolve heat and give
                   off a gas or form a foam, they achieve.
SUMM
                          . . in an aqueous medium. In the other of said compartments there
                   is housed a substantially anhydrous composition which includes a
                   reductant, a water-soluble organic solvent, a compressible gas which is substantially water-insoluble but which is soluble in said organic
                   solvent, said. . . for instance, of the order of 70^{\circ}\text{C.}, depending upon a number of factors including the selection of particular
                   oxidants and reductants.
 SUMM
                   The reductant-containing composition which, for convenience, may be
                   called the B composition, will generally contain the reductant (or
```

reducing agent) in proper amount to react with the quantity of oxidant

- in the A composition. Various **reductants** can be employed such as sodium or potassium salts of sulfurous acid or thiosulfuric acid as, for instance, sodium sulfite or potassium **thiosulfate**. Other **reductants** which can be utilized are shown, for example, in the aforementioned patents. It is particularly preferred to use sodium sulfite.
- SUMM The proportions of the oxidant and **reductant**, in relation to each other, are variable and will depend, of course, upon the particular oxidants and **reductants** utilized, generally being employed in approximately the proper stoichiometric proportions to achieve the exothermic reaction. In the case of the use of hydrogen peroxide as the oxidant and sodium sulfite as the **reductant**, 1 mol % of hydrogen peroxide is desirably used with about 3.7 mol % of sodium sulfite on the anhydrous. . .
- SUMM In addition to the **reductant**, or mixtures of **reductants**, the B composition will also contain a non-aqueous organic solvent in which the **reductant** is soluble or dispersible or suspendable, and in which organic solvent compressed or compressible gas or gases are dissolved whereby. . .
- SUMM . . . at room temperatures, or use temperatures, namely, the temperatures which are produced by the interaction of the oxidant and the **reductant** when the A and B compositions are mixed together (at ambient or atmospheric pressure) and which exists as a liquid. . .
- SUMM . . . present invention includes two flexible or collapsible compartments, one for holding the oxidant-containing composition and the other for holding the **reductant**-containing composition, the construction being such that, when the package or container is squeezed in the hand, substantially equal internal pressures. . .
- DETD . . . desired unformity of collapsing, creating essentially equal pressures within each of the compartments (15, 16), as well as essentially equal **reductions** in compartment volumes. Both of the tube elements can be simultaneously compressed by the grasp of a single hand, as. . .
- DETD . . . the dispenser container, compositions A and B are filled into their respective compartments, such as the compartment 16 for the reductant-containing composition before the end closure 17 is formed, and compartment 15 for oxidant-containing composition. The heat sealed end closure is. . .
- DETD . . . substantial content of water, the water constituting about 37 percent of the (b) mixture and about 30 percent of the **shaving cream** as a whole. The gas is suspended in a metastable state in the examples as described in the above patent,. . .
- CLM What is claimed is:
- an oxidant in an aqueous medium, and the other of said compartments containing a substantially anhydrous composition which includes a reductant, a water-soluble organic solvent, a compressible gas which is substantially water-insoluble but which is soluble in said organic solvent, said. . .
- CLM What is claimed is:
- compartments containing a substantially anhydrous composition which includes a sodium or potassium salt of sulfurous or thiosulfuric acid as a reductant, a water-soluble organic solvent, a compressible gas which is substantially water-insoluble but which is soluble in said organic solvent, said. . .
- CLM What is claimed is:
 - . . 2, in which the oxidant is a 1 to 20 percent aqueous solution of hydrogen peroxide, and in which the **reductant** is
- CLM What is claimed is:
 7. The package of claim 6, in which the **reductant**-containing composition includes stearic acid, coconut oil fatty acids, diethanolamine, a water-soluble alkylene glycol, cetyl alcohol, and a polyethylene glycol
- CLM What is claimed is:
 8. The package of claim 3, in which the vapor pressure of the reductant-containing composition is in the range of from 0 to 10 psig at
- CLM What is claimed is:
 11. The package of claim 10, in which the organic solvent in said
 reductant-containing composition comprises a water-soluble alkylene

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L10 ANSWER 25 OF 32 USPATOLD on STN
Full Text
       1974:66209 USPATOLD
ΑN
       THERMOGENIC SYSTEMS
ΤI
ΙN
       MARGOLIS E
PΑ
       DART INDUSTRIES INC.
       US 3804771
                               19740416
PΙ
       Another redox heating system is found in Antonell et al., U.S. Pat.
DETD
       3,632,516, which employs as a reductani potassium thiosulfate or a
       mixture of potassium thic sulfate and potassium sulfite with a sodium
       tungstat catalyst. While oxidation of thiosulfate ion provides greater
       heat yield than does the oxidation of thioures the problem with this
       system is the fact that for ever mole of thiosulfate oxidized, two
       moles of sulfate io are generated requiring the presence of excess base
       t prevent the pH from dropping precipitously and inhibi ing the
       formation of a soap. The thiosulfate and sulfit salts tend to cause
       gelling of soap compositions and ai also highly corrosive to metal
       dispensing containers an.
       . . above mixture reached a temperature 11 C. higher and reacted
DETD
       more rapidly in the presence of 0.1% catalyst than did thiosulfate
       with 0.5% catalyst (the catalyst being sodium molybdate). The same
       reductant and oxidant combination without sulfite present gave
       identical results.
DETD
       . . system wherein the two phases are mixed immediately before use.
       One phase contains an oxidant and the other contains a reductant
       whereby mixing the two evolves enough heat to produce a sensible rise in
       the temperature of the dispensed mixture. A. . . at least C. above room temperature is generally considered desirable. In the specific
       examples given hereinbelow, the weight ratio of reductant to oxidant
       was about 3:1. This 4,7 1 effected a temperature rise greater than F. in
       the dispensed product. It.
       . . . a two-part system within isolated compartments in a dispensing
DETD
       package. The hydrogen peroxide being in one part and the thermogen
       (reductant) in the other part. The thermogen part may contain the
       consumertype ingredients if compatible. It is to be understood that. .
       As mentioned, the oxidant and reductant compositions are packaged
DETD
       within a container in such a way as to remain isolated from each other.
       Valve means are. .
       The proportion of oxidants and reductants to the total composition
DETD
       depends upon how much heat is desired, how much heat is required to heat
       the composition. . . dissipated. Generally, a much higher temperature
       rise will be utilized in hot windshield deicing compositions or engine
       degreasing compositions than shaving cream or cleansing preparations
       or other personal-use products.
       EXAMPLE 1.HOT SHAVING CREAM
DETD
L10 ANSWER 26 OF 32 USPATOLD on STN
Full Text
       1972:58646 USPATOLD
ΑN
       SELF HEATING LATHER
ΤI
IN
       BODEN HERBERT
       ANTONELLI JOSEPH A
       E. I. DU PONT DE NEMOURS AND COMPANY
PA
PΙ
       US 3632516
                  A 19720104
       Another system, Moses et al., U.S. Pat. 3,341,418, employs a redox
DETD
       reaction with non-electrolyte reductants contained in a soap solution
       and hydrogen peroxide or urea hydrogen peroxide oxidants. The particular
       reductants utilized are thiourea and various thiobarbituric acid
       derivatives. The reaction of hydrogen peroxide with thiourea is
       accompanied by an unpleasant.
       . . in Hayes et al., U.S. Pat. 3,326,416 and employs heating by
DETD
       redox reaction with hydrogen peroxide oxidant and potassium sulfilte
       reductant. The high concentration of potassium sulfilte necessary to
       effect a satisfactory temperature increase has a rapid corrosive effect
       on the.
               lather to a C. increase in temperature, assuming the ratio of
DETD
       the volume of hydrogen peroxide to solution containing the reductant
```

leaving little room for the generated gas, it is readily

appreciated that the developed pressure would be very high. Potassium thiosulfate would appear, from consideration of the small amounts

DETD

required as shown in Table 1, to be an excellent **reductant**. Further, the **thiosulfate** salt can be introduced into soap solution to about 12.5 wt. percent, a concentration theoretically more than adequate to heat. . .

- DETD . . . of total composition, (B) Hydrogen peroxide which is capable of reacting with rapid generation of heat when contacted with a reductant, (C) A reductant composition capable of reacting at 25 room temperature with said hydrogen peroxide to produce heat, said reductant composition being selected from the group consisting of:
- DETD (a) Potassium **thiosulfate** and a catalytic amount of sodium, tungstate (b) A mixture of potassium **thiosulfate** and potassium sulfite and a catalytic amount of sodium tungstate; materials (B) and (C) being isolated from sach other when. . .
- isolated from sach other when. . .

 DETD . . . pressurized dispenser, said lather being heated by a redox reaction between separately contained but co-dispensed hydrogen peroxide oxidant and a reductant composition contained in a soap solution, the improvement comprising the use of a reductant composition selected from the group consisting of:
- DETD (A) Potassium **thiosulfate** and a catalytic amount of sodium tungstate, (B) A mixture of potassium **thiosulfate** and potassium sulfite and a catalytic amount of sodium tungstate.
- DETD . . . invention comprises a warm aqueous foam composition obtained by intimately GO contracting an aqueous foamable composition with H2O2 and a reductant composition described as above.
- DETD Any dispensing container may be employed in the package of this invention provided the container maintains the oxidant and the reductant in separate compartments prior to dispensing them. One such container is depicted in the drawing and is described as follows.

 DETD . . from the pressurized container. The type and concentration of
- DETD . . . from the pressurized container. The type and concentration of agent is readily determined by one skilled in the art. For **shaving foam**, however, the composition usually contains about four to about thirty percent by weight of foam producing agent. Useful such agents.
- The reactants of the present invention are stored separately within the DETD dispenser, one reactant (the **reductant** composition) being maintained in the aqueous dispersion of a foamable composition. When this reductant composition is the mixture of potassium thiosulfate and potassium sulfite in the presence of catalytic amounts of sodium tungstate, the mole ratio of the potassium thiosulfate to potassium sulfite is not critical; however, preferably the mole ratio should be about 0.4 to 0.9. Also for good results, the amount of the reductant composition in the aqueous dispersion should range from 3% to 8% by weight. The amount of catalyst present should range from .05% to .85% by weight of the **reductants** employed. The other reactant (hydrogen peroxide oxidant) is stored in an inner container, preferably a collapsible compartment within and smaller. . . outside container, the amount of hydrogen peroxide oxidant stored therein being chemically equivalent to or less than the amount of reductant present. The liquid reactants are dispensed simultaneously through an outlet after passing through the valve at the top of the outer container. In general, the dispersing ducts of the container are adjusted so that an excess of the reductant with catalyst-up to 20%-is combined with the hydrogen peroxide in order to avoid the possibility of an excess amount of.
- DETD . . . stored at room temperature until needed but had to be rewarmed before blending with part B. Part B contains the **reductant** composition (described as material (C) in this invention) and was prepared as follows:
- DETD Part B Deionized water was heated to C. and **reductants** (material (C) variable percent, see examples)1, potassium hydroxide (1.2%) and triethanolamine (3.5%) were dissolved in the water.
- DETD . . . after reaction as measured with pH paper. Raising the pH of the soap solution, of course, promotes the reaction of **thiosulfate** ion with hydrogen peroxide.
- DETD In the examples, except as otherwise indicated, 20 10 grams of the above-described soap solutions containing **reductant**(s) in proportions stated in each example were reacted with 5 g, aqueous hydrogen peroxide of the stated concentration. The 4:1. . .
- DETD Weight percent of **reductants** in the examples is :based 3n the weight of the soap solution. Weight percent of hydrogen peroxide is the concentration. . .
- DETD EXAMPLE 7 This: example and the following example Demonstrate the effectiveness: of sodium tungstate in S203=/S03= combined **reductant**

- system. It is seen that 0.25% sodium tungstate effects a reaction satisfactory in all respects.
- DETD . . . weight of soap solution for each part of weight of hydrogen peroxide solution, the ratio of equivalents of oxidant to **reductants** is 1.0. A slight excess of **reductant** is usually preferred.
- DETD EXAMPLE This example shows in two concentrations of hydrogen peroxide the performance replication of pressurized dispensers using K2S2C>3-Na2WO4 reductant, over a period of 46 days.
- DETD EXAMPLE 11 K2SO3 (4 wt. percent) reductant in soap solution was combined with H2O2 (3.5 wt. percent) where percent of theoretical equivalents of H2O2 present was 102.. . .
- DETD EXAMPLE 12 The **reductant** employed in the soap solution was K2S2Os (3.0 wt. percent) and was combined with H2O2 (8.2 wt. percent) where the.
- DETD This example combined K2S2O3 (4.0 wt. percent) **reductant** in soap solution with H2O2 (8.2 wt. percent) where the percent of theoretical equivalents of H2O2 present was 71.7. As. . .
- of total composition, (B) hydrogen peroxide which is capable of reacting with rapid generation of heat when contacted with a **reductant**, (C) a **reductant** composition present in an amount between 3 and 8% based on the weight of (A) present, said **reductant** composition being capable of reacting at room temperature with the said hydrogen peroxide to produce heat, and said **reductant** composition being selected from the group consisting of (a) potassium **thiosulfate** and a catalytic amount of sodium tungstate, and (b) a mixture of potassium **thiosulfate** and potassium sulfite and a catalytic amount of sodium tungstate the amount of (B) present being chemically equivalent to or. . . is being conveyed toward said outlet.
 - 2. A package according to claim 1 in which the re-ductant composition is potassium ${\bf thiosulfate}$ in the presence of catalytic amounts of sodium tungstate.
 - 3. A package according to claim 1 in which the re-ductant composition is a mixture of potassium **thiosulfate** and potassium sulfite in the presence of catalytic amounts of sodium tungstate.
 - 4. A package according to claim 1 in. . .

=> d 110 an ti in pa pi kwic 23 25 26

L10 ANSWER 23 OF 32 USPATFULL on STN

Full Text

AN 75:8529 USPATFULL

- TI NON-PRESSURIZED PACKAGE CONTAINING SELF-HEATING PRODUCTS
- IN Schmitt, William H., Elmhurst, IL, United States
- PA Alberto Culver Company, Melrose Park, IL, United States (U.S. corporation)
- PI US 3866800 19750218
- AB . . . an oxidant in an aqueous medium, and the other of said compartments containing a substantially anhydrous composition which includes a **reductant**, a water-soluble organic solvent, a compressible gas which is substantially water-insoluble but which is soluble in said organic solvent, said. . .
- SUMM . . . storage of the two parts of the compositions, one of said parts containing an oxidant and the other containing a **reductant**, said two parts being adapted to be dispensed simultaneously with mixing whereby, on being admixed, an exothermic reaction occurs. Each of the two-part compositions contains various ingredients, in addition to their respective oxidant and **reductant**, including substantial proportions of water. The packages or containers in which said two-part compositions are packaged and from which they. . .
- SUMM . . . of foam. While they employ separate compositions, one of which contains an oxidant and the other of which contains a **reductant**, and which separate compositions when admixed together evolve heat and give off a gas or form a foam, they achieve. . .
- SUMM . . . in an aqueous medium. In the other of said compartments there is housed a substantially anhydrous composition which includes a reductant, a water-soluble organic solvent, a compressible gas which is substantially water-insoluble but which is soluble in said organic solvent, said. . . for instance, of the order of 70°C., depending upon a number of factors including the selection of particular oxidants and reductants.

- The reductant-containing composition which, for convenience, may be SUMM called the B composition, will generally contain the reductant (or reducing agent) in proper amount to react with the quantity of oxidant in the A composition. Various **reductants** can be employed such as sodium or potassium salts of sulfurous acid or thiosulfuric acid as, for instance, sodium sulfite or potassium thiosulfate. Other reductants which can be utilized are shown, for example, in the aforementioned patents. It is particularly preferred to use sodium sulfite.
- SUMM The proportions of the oxidant and reductant, in relation to each other, are variable and will depend, of course, upon the particular oxidants and reductants utilized, generally being employed in approximately the proper stoichiometric proportions to achieve the exothermic reaction. In the case of the use of hydrogen peroxide as the oxidant and sodium sulfite as the reductant, 1 mol % of hydrogen peroxide is desirably used with about 3.7 mol % of sodium sulfite on the anhydrous.
- SUMM In addition to the reductant, or mixtures of reductants, the B composition will also contain a non-aqueous organic solvent in which the reductant is soluble or dispersible or suspendable, and in which organic solvent compressed or compressible gas or gases are dissolved whereby.
- . . . at room temperatures, or use temperatures, namely, the SUMM temperatures which are produced by the interaction of the oxidant and the reductant when the A and B compositions are mixed together (at ambient or atmospheric pressure) and which exists as a liquid.
- . . present invention includes two flexible or collapsible SUMM compartments, one for holding the oxidant-containing composition and the other for holding the **reductant**-containing composition, the construction being such that, when the package or container is squeezed in the hand, substantially equal internal pressures.
- . . . desired unformity of collapsing, creating essentially equal DETD pressures within each of the compartments (15, 16), as well as essentially equal reductions in compartment volumes. Both of the tube elements can be simultaneously compressed by the grasp of a single hand,
- as. . .

 the dispenser container, compositions A and B are filled into DETD their respective compartments, such as the compartment 16 for the reductant-containing composition before the end closure 17 is formed, and compartment 15 for oxidant-containing composition. The heat sealed end closure is.
- . . substantial content of water, the water constituting about 37 DETD percent of the (b) mixture and about 30 percent of the shaving cream as a whole. The gas is suspended in a metastable state in the examples as described in the above patent,.
- What is claimed is: CLM
- . an oxidant in an aqueous medium, and the other of said compartments containing a substantially anhydrous composition which includes a reductant, a water-soluble organic solvent, a compressible gas which is substantially water-insoluble but which is soluble in said organic solvent, said. . What is claimed is:
- CLM
- compartments containing a substantially anhydrous composition which includes a sodium or potassium salt of sulfurous or thiosulfuric acid as a reductant, a water-soluble organic solvent, a compressible gas which is substantially water-insoluble but which is soluble in said organic solvent, said.
- CLMWhat is claimed is:
 - . 2, in which the oxidant is a 1 to 20 percent aqueous solution of hydrogen peroxide, and in which the reductant is
- CLMWhat is claimed is: 7. The package of claim 6, in which the reductant-containing composition includes stearic acid, coconut oil fatty acids, diethanolamine, a water-soluble alkylene glycol, cetyl alcohol, and a polyethylene glycol
- CLMWhat is claimed is: 8. The package of claim 3, in which the vapor pressure of the reductant-containing composition is in the range of from 0 to 10 psig at
- CLMWhat is claimed is: 11. The package of claim 10, in which the organic solvent in said

- L10 ANSWER 25 OF 32 USPATOLD on STN

 Full Text
 AN 1974:66209 USPATOLD

 TI THERMOGENIC SYSTEMS
 IN MARGOLIS E
 PA DART INDUSTRIES INC.
 PI US 3804771 A 19740416

 DETD Another redox heating system is
 3,632,516, which employs as a remixture of potassium thic sulfat tungstat catalyst. While oxidati
- Another redox heating system is found in Antonell et al., U.S. Pat. 3,632,516, which employs as a **reductani** potassium **thiosulfate** or a mixture of potassium thic sulfate and potassium sulfite with a sodium tungstat catalyst. While oxidation of **thiosulfate** ion provides greater heat yield than does the oxidation of thioures the problem with this system is the fact that for ever mole of **thiosulfate** oxidized, two moles of sulfate io are generated requiring the presence of excess base t prevent the pH from dropping precipitously and inhibi ing the formation of a soap. The **thiosulfate** and sulfit salts tend to cause gelling of soap compositions and ai also highly corrosive to metal dispensing containers an. . .
- DETD . . . above mixture reached a temperature 11 C. higher and reacted more rapidly in the presence of 0.1% catalyst than did **thiosulfate** with 0.5% catalyst (the catalyst being sodium molybdate). The same **reductant** and oxidant combination without sulfite present gave identical results.
- DETD . . . system wherein the two phases are mixed immediately before use. One phase contains an oxidant and the other contains a **reductant** whereby mixing the two evolves enough heat to produce a sensible rise in the temperature of the dispensed mixture. A. . . at least C. above room temperature is generally considered desirable. In the specific examples given hereinbelow, the weight ratio of **reductant** to oxidant was about 3:1. This 4,7 1 effected a temperature rise greater than F. in the dispensed product. It. . .
- DETD . . . a two-part system within isolated compartments in a dispensing package. The hydrogen peroxide being in one part and the thermogen (reductant) in the other part. The thermogen part may contain the consumertype ingredients if compatible. It is to be understood that. .
- DETD As mentioned, the oxidant and **reductant** compositions are packaged within a container in such a way as to remain isolated from each other. Valve means are. . .
- DETD The proportion of oxidants and **reductants** to the total composition depends upon how much heat is desired, how much heat is required to heat the composition. . . dissipated. Generally, a much higher temperature rise will be utilized in hot windshield deicing compositions or engine degreasing compositions than **shaving cream** or cleansing preparations or other personal-use products.
- DETD EXAMPLE 1.HOT SHAVING CREAM
- L10 ANSWER 26 OF 32 USPATOLD on STN

- AN 1972:58646 USPATOLD
- TI SELF HEATING LATHER
- IN BODEN HERBERT
 - ANTONELLI JOSEPH A
- PA E. I. DU PONT DE NEMOURS AND COMPANY
- PI US 3632516 A 19720104
- DETD Another system, Moses et al., U.S. Pat. 3,341,418, employs a redox reaction with non-electrolyte **reductants** contained in a soap solution and hydrogen peroxide or urea hydrogen peroxide oxidants. The particular **reductants** utilized are thiourea and various thiobarbituric acid derivatives. The reaction of hydrogen peroxide with thiourea is accompanied by an unpleasant. . .
- DETD . . . in Hayes et al., U.S. Pat. 3,326,416 and employs heating by redox reaction with hydrogen peroxide oxidant and potassium sulfilte reductant. The high concentration of potassium sulfilte necessary to effect a satisfactory temperature increase has a rapid corrosive effect on the. . .
- DETD . . . lather to a C. increase in temperature, assuming the ratio of the volume of hydrogen peroxide to solution containing the **reductant** is 1:4.

- DETD . . . leaving little room for the generated gas, it is readily appreciated that the developed pressure would be very high. Potassium thiosulfate would appear, from consideration of the small amounts required as shown in Table 1, to be an excellent reductant. Further, the thiosulfate salt can be introduced into soap solution to about 12.5 wt. percent, a concentration theoretically more than adequate to heat
- DETD . . . of total composition, (B) Hydrogen peroxide which is capable of reacting with rapid generation of heat when contacted with a reductant, (C) A reductant composition capable of reacting at 25 room temperature with said hydrogen peroxide to produce heat, said reductant composition being selected from the group consisting of:
- DETD (a) Potassium thiosulfate and a catalytic amount of sodium, tungstate (b) A mixture of potassium thiosulfate and potassium sulfite and a catalytic amount of sodium tungstate; materials (B) and (C) being isolated from sach other when. . .
- DETD . . . pressurized dispenser, said lather being heated by a redox reaction between separately contained but co-dispensed hydrogen peroxide oxidant and a **reductant** composition contained in a soap solution, the improvement comprising the use of a **reductant** composition selected from the group consisting of:
- DETD (A) Potassium thiosulfate and a catalytic amount of sodium tungstate,
 (B) A mixture of potassium thiosulfate and potassium sulfite and a
 catalytic amount of sodium tungstate.
- DETD . . . invention comprises a warm aqueous foam composition obtained by intimately GO contracting an aqueous foamable composition with H2O2 and a **reductant** composition described as above.
- DETD Any dispensing container may be employed in the package of this invention provided the container maintains the oxidant and the reductant in separate compartments prior to dispensing them. One such container is depicted in the drawing and is described as follows.
- DETD . . . from the pressurized container. The type and concentration of agent is readily determined by one skilled in the art. For **shaving foam**, however, the composition usually contains about four to about thirty percent by weight of foam producing agent. Useful such agents.
- DETD The reactants of the present invention are stored separately within the dispenser, one reactant (the reductant composition) being maintained in the aqueous dispersion of a foamable composition. When this reductant composition is the mixture of potassium thiosulfate and potassium sulfite in the presence of catalytic amounts of sodium tungstate, the mole ratio of the potassium thiosulfate to potassium sulfite is not critical; however, preferably the mole ratio should be about 0.4 to 0.9. Also for good results, the amount of the **reductant** composition in the aqueous dispersion should range from 3% to 8% by weight. The amount of catalyst present should range from .05% to .85% by weight of the reductants employed. The other reactant (hydrogen peroxide oxidant) is stored in an inner container, preferably a collapsible compartment within and smaller. . . outside container, the amount of hydrogen peroxide oxidant stored therein being chemically equivalent to or less than the amount of reductant present. The liquid reactants are dispensed simultaneously through an outlet after passing through the valve at the top of the outer container. In general, the dispersing ducts of the container are adjusted so that an excess of the reductant with catalyst-up to 20%-is combined with the hydrogen peroxide in order to avoid the possibility of an excess amount of. DETD
- DETD . . . stored at room temperature until needed but had to be rewarmed before blending with part B. Part B contains the **reductant** composition (described as material (C) in this invention) and was prepared as follows:
- DETD Part B Deionized water was heated to C. and **reductants** (material (C) variable percent, see examples)1, potassium hydroxide (1.2%) and triethanolamine (3.5%) were dissolved in the water.
- DETD . . . after reaction as measured with pH paper. Raising the pH of the soap solution, of course, promotes the reaction of **thiosulfate** ion with hydrogen peroxide.
- DETD In the examples, except as otherwise indicated, 20 10 grams of the above-described soap solutions containing **reductant**(s) in proportions stated in each example were reacted with 5 g, aqueous hydrogen peroxide of the stated concentration. The 4:1. . .
- DETD Weight percent of **reductants** in the examples is :based 3n the weight of the soap solution. Weight percent of hydrogen peroxide is the

concentration.

- DETD EXAMPLE 7 This: example and the following example Demonstrate the effectiveness: of sodium tungstate in S203=/S03= combined reductant system. It is seen that 0.25% sodium tungstate effects a reaction satisfactory in all respects.
- . . . weight of soap solution for each part of weight of hydrogen peroxide solution, the ratio of equivalents of oxidant to **reductants** DETD is 1.0. A slight excess of reductant is usually preferred.
- EXAMPLE This example shows in two concentrations of hydrogen peroxide the performance replication of pressurized dispensers using K2S2C>3-Na2WO4 reductant, over a period of 46 days.
- EXAMPLE 11 K2SO3 (4 wt. percent) reductant in soap solution was DETD combined with H2O2 (3.5 wt. percent) where percent of theoretical equivalents of H2O2 present was 102.. . . EXAMPLE 12 The **reductant** employed in the soap solution was K2S2Os (3.0)
- DETD wt. percent) and was combined with H2O2 (8.2 wt. percent) where the.
- This example combined K2S2O3 (4.0 wt. percent) reductant in soap DETD solution with H2O2 (8.2 wt. percent) where the percent of theoretical equivalents of H2O2 present was 71.7. As. . CLM
- of total composition, (B) hydrogen peroxide which is capable of reacting with rapid generation of heat when contacted with a reductant, (C) a reductant composition present in an amount between 3 and 8% based on the weight of (A) present, said reductant composition being capable of reacting at room temperature with the said hydrogen peroxide to produce heat, and said reductant composition being selected from the group consisting of (a) potassium thiosulfate and a catalytic amount of sodium tungstate, and (b) a mixture of potassium thiosulfate and potassium sulfite and a catalytic amount of sodium tungstate the amount of (B) present being chemically equivalent to or. . . is being conveyed toward said outlet.
 - 2. A package according to claim 1 in which the re-ductant composition is potassium thiosulfate in the presence of catalytic amounts of sodium tungstate.
 - 3. A package according to claim 1 in which the re-ductant composition is a mixture of potassium thiosulfate and potassium sulfite in the presence of catalytic amounts of sodium tungstate.
 - 4. A package according to claim 1 in. . .

=> log yCOST IN U.S. DOLLARS

FULL ESTIMATED COST

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